

Duquesne University:



newcomen society in north America
V. 53
P-21
(69)

"W. P. I."

(Worcester Polytechnic Institute)

(1865-1957)

*Cultivator of
Yankee Ingenuity*

ARTHUR BRONWELL



580

1957

2061

N541

V. 53

[no. 580]



TI
N493x
Vol 53

"Were American Newcomen to do naught else, our work is well done if we succeed in sharing with America a strengthened inspiration to continue the struggle towards a nobler Civilization—through wider knowledge and understanding of the hopes, ambitions, and deeds of leaders in the past who have upheld Civilization's material progress. As we look backward, let us look forward."

—CHARLES PENROSE

*Senior Vice-President for North America
The Newcomen Society of England*



This statement, crystallizing a broad purpose of the society, was first read at the Newcomen Meeting at New York World's Fair on August 5, 1939, when American Newcomen were guests of The British Government

"Actorum Memores simul affectamus Agenda"

"W. P. I."—(1865-1957)

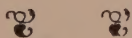
WORCESTER POLYTECHNIC INSTITUTE

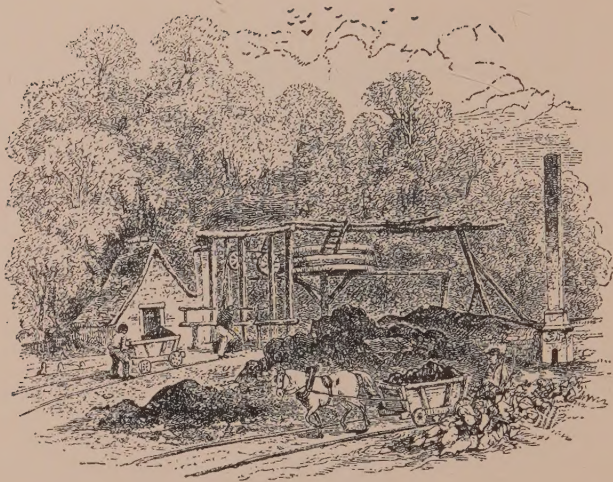
Cultivator of Yankee Ingenuity

An Address in Massachusetts



AMERICAN NEWCOMEN, *through the years, has honored numerous seats of learning, both in the United States of America and in Canada. Such a Newcomen manuscript is this, dealing with the history of the well-known Worcester Polytechnic Institute, whose important contributions, since 1865, to technological education and training in New England have earned for it a slogan: "Cultivator of Yankee Ingenuity!"*





“America’s industrial might has its roots deeply planted in American Education. The rising crescendo of human achievement which transformed this Nation from an essentially agrarian economy into a position of world leadership in scarcely half a century was essentially the triumph of new ideas over the dead weight of tradition. It was a triumph of the principles of democracy!”

—ARTHUR BRONWELL



“W. P. I.”
(1865-1957)
*Cultivator of
Yankee Ingenuity*

ARTHUR BRONWELL

M.S., M.B.A., LL.D.

MEMBER OF THE NEWCOMEN SOCIETY

PRESIDENT

WORCESTER POLYTECHNIC INSTITUTE

WORCESTER

MASSACHUSETTS



THE NEWCOMEN SOCIETY IN NORTH AMERICA
NEW YORK SAN FRANCISCO MONTREAL

1957

Copyright, 1957
ARTHUR BRONWELL



*Permission to abstract is granted
provided proper credit is allowed*



*The Newcomen Society, as a body,
is not responsible for opinions
expressed in the following pages*



*First Printing: September 1957
Second Printing: September 1957*



*This Newcomen Address, dealing with the
history of Worcester Polytechnic Institute,
was delivered at the "1957 Massachusetts
Luncheon" of The Newcomen Society in
North America, held at Tatnuck Country
Club, at Worcester, Massachusetts, U.S.A.,
when Dr. Bronwell was the guest of honor,
on September 19, 1957*



SET UP, PRINTED AND BOUND IN THE UNITED STATES
OF AMERICA FOR THE NEWCOMEN PUBLICATIONS IN
NORTH AMERICA BY PRINCETON UNIVERSITY PRESS





INTRODUCTION OF DR. BRONWELL, AT WORCESTER ON SEPTEMBER 19, 1957, BY PHILIP M. MORGAN, PRESIDENT, MORGAN CONSTRUCTION COMPANY, WORCESTER; CHAIRMAN, BOARD OF TRUSTEES, WORCESTER POLYTECHNIC INSTITUTE; VICE-CHAIRMAN, NEW ENGLAND COMMITTEE, IN THE NEWCOMEN SOCIETY IN NORTH AMERICA.

My fellow members of Newcomen:

PROGRESS seems to be innate in American thinking. It characterizes American enterprise in every area where that enterprise seeks to operate. Certainly, American higher education is one of those fields especially dedicated to progress.



Worcester Polytechnic Institute, founded nearly 100 years ago, is one of those institutions of higher education which has sought constantly to progress in all phases of its educational program. In our opinion, it has justly earned an enviable reputation as one of the leading engineering colleges in the Country.



Among its faculty have been many eminent teachers, distinguished for their teaching competence as well as for their leadership in the advancement of scientific and technological knowledge. Its graduates have a fine record of leadership in industry, government, engineering, science, and education. Business and industry,

especially, have received the dividends from Worcester Tech's achievements in engineering and science education.



Worcester Tech, then and today, is dedicated to the education of youth whose efforts will help America to move forward as a dynamic, forceful, and progressive nation.



Worcester Tech believes that scientific and engineering education should: 1—develop understanding and competence in the fundamentals of science and engineering; 2—have a cultural breadth, so that the students gain an appreciation of the heritage of human progress which has built our political, industrial, social, and economic systems; and 3—give students an appreciation of the humanities to help them to develop a sound philosophy of life.



When I mention these characteristics of Worcester Tech to you members of The Newcomen Society, I am sure that you must be acutely aware of my own faith in and loyalty to this fine college.



And I am equally certain that you will sense the college's dedication to the perhaps sacred task of higher education of American youth as you listen to ARTHUR BRONWELL, its President, whom it is my pleasure to introduce at this time.





My fellow members of Newcomen:

On behalf of the Board of Trustees, the Faculty, the Alumni, and the Students, may I express our appreciation to The Newcomen Society in North America for the honor you pay Worcester Polytechnic Institute today.



America's industrial might, *Mr. Chairman*, has its roots deeply planted in American Education. The rising crescendo of human achievement which transformed this Nation from an essentially agrarian economy into a position of world leadership in scarcely half a century was essentially the triumph of new ideas over the dead weight of tradition. It was a triumph of the principles of democracy! Democracy, with its emphasis upon human freedoms and the dignity and worth of man; with its inalienable rights of people to redress the balances through representative government; with its spirit of competition and its generous incentives for successful achievement—all of which served vitally to stimulate creative minds.



But underlying this crescendo of achievement there was also the triumph of a new adventure in higher education. For modern in-

dustry, with its intricate technology and its complex problems of organization and management, could never have been created on the scale of magnitude which we know today without the bold and adventurous pioneering of higher education in America. In their educational patterns, American colleges and universities emulated their highly successful European predecessors. But in one respect they broke sharply with European tradition. It was this innovation which gave American industry the power to rise far above that of Europe.



European colleges and universities traditionally restricted the benefits of higher education to a privileged few, first the aristocracy and later those with highest scholarly attainments, but always on a narrowly selective basis. Under the shaping forces of democracy, our people could not accept this principle of a privileged elite. With vigorous efforts, they pressed forward to build colleges and universities throughout the Nation which would extend the benefits of higher education to the largest number of qualified persons. In retrospect, it is clearly evident that had American higher education adhered to the restrictive European pattern, American industry and American economy today would be but shadows of themselves.



The American experiment has shown beyond all doubt that it is impossible to predict where great creative talent and great leadership will emerge. For the well-springs of greatness often reside deeply in the minds and hearts of people who are not among the scholarly ranks as measured by academic standards.



Over a span of half a century, from about 1850 to 1900, a great rolling wave of enthusiasm for higher education spread throughout the Country, bringing into being most of our better-known, privately-endowed colleges and universities. It was the local minister, the industrial leader, the banker, the lawyer, and the doctor who wanted to build the cathedrals of opportunity in learning for their children and their children's children so that they might live fuller and more creative lives.

In this surge of sacrifice and achievement, the funds were raised, the colleges were built, the faculties were hired and higher education in America got off to an auspicious beginning. No other investment—I repeat, no other investment, has ever yielded more munificent returns than America's investment in higher education. Here was the investment which had the geometrical power of progression which would lift this Country's creative capacities to untold heights.



John Boynton was a familiar and always welcome sight to the farmers and villagers of New Hampshire as he rode along the dusty roads in his horse-drawn cart. For he brought them the tin pails, tin plates, water dippers, and other household items which gave them a more luxurious life. But he was a young and enterprising man. In his heart there was a yearning to build his own factory. Soon he realized his ambition and, over the years, his tinware factory flourished as his products became widely known throughout New England.



Just after the close of the Civil War, while the Nation was still in the anguish and turmoil of recovery, John Boynton confided to his business partner, David Whitcomb, his ambition to establish a school where young men could receive a practical education. The outlines were vague, but the desire was intense.



David Whitcomb, in turn, sought the advice of a prominent Worcester minister, The Reverend Seth Sweetser, and an industrialist and former Governor of the State, Emory Washburn, who had been a trustee of Williams College and an overseer of Harvard College. The project was irresistibly challenging and soon others were drawn into the inner circle, including two men, one of whom was destined to become one of the outstanding United States Senators of all times, George Frisbie Hoar; and the other, a business man who was later to be principal benefactor of the new college, Stephen Salisbury.

Deeply ingrained in their hearts was one basic principle—that the new college should be established on the free-enterprise concept, guided and managed by prominent leaders in the community. The tyranny of government control and the suffocation by government domination, which had been the European experience were vividly etched in their minds.



As so often happens in the course of human events, a vigorous clash of ideas evolves a plan of action which is more tenable and more enduring than the original proposal. A prominent Worcester industrialist, Ichabod Washburn, founder of the Washburn-Moen Iron Works, which later became the American Steel and Wire Company, had for several years been independently formulating a plan for a new school which would strongly emphasize the skills in the manual arts. To him, the Boynton proposal, which was rapidly taking shape, was just another “theoretic school, one more academy to struggle for life.” This conflict was artfully resolved when Ichabod Washburn proposed to provide a building to house the shops for the training in the manual skills, while John Boynton’s gift, together with other funds to be raised, would be used to construct a building for classrooms and administration.



The people in Worcester accepted the challenge when a vigorous fund-raising program was launched and over \$63,000 was added to John Boynton’s generous gift of \$100,000. This provided the new building and the initial funds for the faculty and administration.



Boynton Hall, the oldest and today the most picturesque building on Worcester Tech’s campus, is a tribute to the high ideals and superb quality of workmanship invested in this great new adventure in education. Etched on a stone high over one of the doors is the proud name, “Worcester County Free Institute of Industrial Science.” The building was situated on top of a hill on a small plot of land contributed by Stephen Salisbury, which was ultimately to be generously enlarged by its principal benefactor.

In any undertaking as significant as the planning of a new college building, experts are indispensable. And so it was that a professor at Williams College, called in as an advisor, stated an eternal truth: "It is entirely useless for a person who has never had any experience to say what students ought to be." He also urged that there be no water closets in the building, but rather that there be a neat row of privies in the back yard, so arranged so that they could be kept in perfect order!



The first President of the new Institute, Dr. Charles O. Thompson, was 31 years of age, a civil engineering graduate of Dartmouth College and a popular lecturer on science. After an extensive visit to technological colleges throughout Europe, Dr. Thompson returned to face not only the problems of recruiting a faculty, but also those of resolving major conflicts in educational policy. But he was an enterprising man with clear and forceful ideas. After careful discussions with the trustees, he prepared a detailed plan for the new Institute, which proposed that, "The school is intended to furnish an education based on the natural sciences, the mathematics, and the modern languages. It is not to be a place where boys can learn trades nor is it to be regarded as an easy road to knowledge."



The college opened its doors for serious business in the Autumn of 1868. Three years later, on a hot July day in 1871, fifteen young men suffered through the interminable tortures of a graduation exercise which lasted all day. The program included the reading of theses, examinations by committees of trustees, and other proper and exacting ordeals to prove beyond a shadow of a doubt that each was fully qualified for his degree. Following this experience, the trustees appointed a committee to investigate how to maintain order at graduation!



A unique feature of the Worcester County Free Institute of Industrial Science, which attracted nation-wide recognition, was its production shops. Here products were manufactured for sale

in the open market and the students gained not only the skills of shop practice, but the experience of working in a going enterprise. The manufactured products were exhibited in trade fairs all over the world and won many awards for their distinctive quality. But the production shops became the focal point of faculty conflict for many years, for periods of financial deficit alternated with those of prosperity, with the deficits often predominating. Because of the meager financial resources of the Institute, the faculty challenged the validity of a production shop which deprived the Institute of funds needed for the academic program. Those responsible for the shops countered equally vociferously that the production shops brought great educational values to the students at only nominal cost. The shops continued in commercial production until two years ago, although student shop instruction had for many years been disassociated from the commercial operation.



Adversity is the stimulus which challenges a people's mettle, according to Arnold Toynbee. If adversity leads to progress, the new college found an abundant stimulus for progress. For the financial limitations of the new college loomed gigantic in proportion. The growing need for higher education and the rising student enrollment quickly engulfed the struggling school in a multitude of problems, not the least of which were financial. But overriding the clash of ideals and the struggle for existence two clear facts emerged. *First*, the new school was serving a vital educational function in an age of rapidly advancing technology. *Second*, Charles Thompson had recruited a faculty of men of great ability and character, and these men were establishing a nationwide reputation for the new school.



After 17 years of successful administration, Dr. Thompson reluctantly left Worcester to move on to his second great accomplishment, the founding of Rose Polytechnic Institute in Terre Haute, Indiana, where he became its first president. His successor at Worcester, Dr. Homer T. Fuller, a Dartmouth graduate, and Congregational minister, soon found himself involved

in a complexity of problems of a growing Institution. The student enrollment was expanding and it was apparent there was serious need for a substantial addition to the buildings and physical facilities.



It was during Dr. Fuller's administration that the Salisbury Laboratories were built for the physics and chemistry departments, Boynton Hall was enlarged, a mechanical engineering building was constructed and the Institute's endowment was substantially increased. It was also at this time that the Alden Laboratory came into existence. Over the years, the Alden Hydraulic Laboratory, on a 600 acre tract of land in Holden, has been of inestimable service to the electrical power industry in effecting great savings through improved designs of hydraulic turbines, river development projects, and hydro-electric dam installations. It has been a significant factor in bringing about the rapid development of water power in this Country. In recent years it has assumed increasing importance in military research dealing with problems relating to the shooting of high speed aerial torpedoes into water.



On one dark night in 1884 there occurred one of those fateful episodes which live on in the memories of a college through generations. "Old Buckskin" a horse owned by the Superintendent of Shops, was painstakingly maneuvered up the circular stairway of Boynton Hall to the third floor where he was stabled in the chapel among the hymn books and prayer books. Next day, chapel services, which were always held punctually and with much piety, were summarily dismissed while the faculty and students puzzled over the problem which seemingly defied all solution, how to get the stubborn beast down the circular staircase. Eventually, with legs tied and eyes bandaged, he was slid on his back down a ramp.



It was Dr. Thomas Corwin Mendenhall, an eminent scientist, world traveler, teacher, and former chief of U.S. Coast and Geodetic Survey, who, as third President of the Institute, brought to the new college faculty many brilliant young men. It was these

men who became nationally prominent in their professions and who were the teachers that brought great distinction to the college over the next thirty years.

About this time, the Institute found itself becoming the pattern of many new technological colleges throughout the Country. In 1883, the creation of a college, later known as the Georgia Institute of Technology, brought to Georgia as founders two of the Institute's leading educators, Milton Higgins and George I. Alden. Again in 1894, when the Armour Institute of Technology was being planned in Chicago, the new trustees visited Worcester to observe the Institute in action. Several years later, Andrew Carnegie's beneficent grant of \$1,000,000 to found the Carnegie Institute of Technology likewise brought the founding trustees to Worcester to investigate matters relating to educational policy, the laboratories, and other facets of the college's operations.



The name of the college was changed to the Worcester Polytechnic Institute, a stark recognition that, with rising costs, education could no longer be free. A legacy of \$200,000 from Stephen Salisbury's estate made possible the construction of a modern electrical engineering building. About this time, the Alumni Association began to move prominently into a position of responsibility, purchasing a substantial tract of land which was to become the alumni athletic field. Later the Association undertook several vigorous fund-raising programs which succeeded in raising funds for a gymnasium and for general Institute purposes.



Worcester Polytechnic Institute at this time was receiving nation-wide recognition, not only because of its educational programs, but also because it became truly the birthplace of a considerable amount of Yankee Ingenuity. Among the members of the faculty and the graduates of the Institute, there were many who created their own companies. One of these was Charles H. Morgan, the first superintendent of the Washburn Shops, and later the founder of the Morgan Spring Company and the Morgan Construction Company, a company of international promi-

nence in the manufacture of steel rolling mills. It was Charles Morgan's son, Paul B. Morgan, who was for many years a Trustee of the Institute, and today his son, Philip M. Morgan, continues not only as President of the vigorous and growing Morgan Construction Company but also as Chairman of the Board of Trustees of Worcester Polytechnic Institute.



Milton P. Higgins, a Dartmouth graduate who was also a superintendent of the Washburn Shops, and George I. Alden, for many years head of the Mechanical Engineering Department and later acting President of the Institute, joined forces with John Jeppson and a Worcester Tech graduate, Fred Harris Daniels, to establish the Norton Company, today the world's largest abrasives company. Among Tech's graduates, James N. Heald, founded the Heald Machine Company, nationally prominent manufacturer of automated machine tools; H. Winfield Wyman and Lyman F. Gordon, jointly founded the Wyman-Gordon Company, one of the foremost steel forging firms in America. George I. Rockwood, a former Professor and for many years a Trustee of the Institute, founded the Rockwood Sprinkler Company; John Woodman Higgins founded the Worcester Pressed Steel Company; R. Sanford Riley and one of Worcester Tech's prominent trustees, F. Harold Daniels, founded the company now known as the Riley Stoker Company; E. Howard Reed founded the Reed Rolled Thread and Die Company; and Albert J. Gifford was one of the founders of Leland-Gifford Company, manufacturer of machine tools. More recently, two of Worcester Tech's graduates, Leonard M. Krull and Earl C. Hughes, joined forces with Oliver Buckner to form the Bay State Abrasive Products Company.



These are but a few of the many companies which today stand as tangible expressions of the Yankee Ingenuity which has been the continuing spirit of this institution. The creation of these companies has had a profound influence upon industrial development throughout New England and the Nation. Worcester Tech's list of illustrious graduates who have achieved eminence as leaders

in industry, in teaching, and in Government is a long and impressive one. But two men should be mentioned because of distinguished achievements in diverse fields. The late Henry J. Fuller of New York, son of a former President of Worcester Tech, was conspicuous for pioneer leadership in the financing of public utilities and industrials—both in the United States and in Canada. The other man was Robert H. Goddard, who laid early scientific foundations for modern rocketry and whose “loose talk” about rocket flights to the Moon brought but scorn and derision.



It was during Ira Hollis' administration that the war clouds darkened over Europe and the United States of America plunged into its first catastrophic overseas war. To this challenge the students and the college moved quickly into action with accelerated educational programs, and U.S. Army and Navy training to prepare the students for military duty. The character of the Institute changed abruptly as the rigors of war imposed a regimented life upon faculty and students. But the termination of the war brought a return to normalcy and of course, the eternal financial problems which now called for vigorous fund-raising efforts.



An unusual method of college financing, the sustaining scholarship, was devised. By this means, Worcester companies united to contribute to an endowment fund, the income from which would provide scholarships for children of the company's employees, with a portion of the income going to the college in recognition of its cost of educating the students. A total of \$375,000 was contributed toward this fund. The General Education Board, established by the Rockefeller interests, contributed \$350,000 toward an endowment fund for the improvement of faculty salaries. Other contributions from alumni and friends brought the grand total of this fund-raising program to more than \$1,500,000.



Admiral Ralph Earle, who succeeded Dr. Hollis as President in 1925, was a U.S. Naval Academy graduate and the youngest

Rear Admiral to receive a Congressional appointment. He had a capacity for organization and a studious, meticulous manner which won the respect of everyone. A distinctive achievement of his administration was the formulation of a long-range development program for the Institute. Admiral Earle was the son of the architect of Boynton Hall and he himself had a sensitivity to architectural style which is reflected in the beauty of the buildings which he planned. It was during his administration that the dormitory was completed in 1928. He planned the Alden Memorial Auditorium, one of the finest college auditoriums of its kind in New England, as well as a new mechanical engineering building, but death overtook him before these plans were realized. Admiral Earle's administration brought to the college a substantial improvement in morale, an increase in the Institute's endowment, and a forward look which was to carry over into succeeding administrations.



It was Wat Tyler Cluverius, a retired U.S. Navy Admiral, and a man of great personal magnetism and distinctive qualities of character, who completed the building program which Admiral Earle had so painstakingly formulated. A generous grant of \$580,000 from the George I. Alden Trust made possible the construction of the Alden Memorial Auditorium. Funds contributed by leading Worcester industrialists made possible the construction of the Higgins Mechanical Engineering building. Then, in 1947-48, the Alumni once more undertook the responsibility of an intensive program to raise funds for the new Civil Engineering Building and also to provide a fund for faculty salaries. In this program, over \$1,200,000 was raised and from this was constructed the Civil Engineering Building, which provides modern well-equipped laboratories for Civil Engineering instruction. A substantial real estate bequest from Forest W. Taylor improved the endowment position of the Institute.



In June of 1956, the Board of Trustees adopted a comprehensive and forward-looking development program designed to keep Worcester Tech in its rightful place among leading engi-

neering colleges of the Nation. Because science and technology are playing such a dominant role in our Nation's industrial and social progress and because of the critical shortage of scientists and engineers in an age of rapidly advancing technology, it was the conviction of the trustees and the alumni that Worcester Polytechnic Institute must strive for new dimensions of educational responsibility. The development program provides for a moderate increase in undergraduate enrollment. It also provides for an enlargement of the graduate studies programs to help meet the acute needs of industry for men with advanced levels of scientific and technological education and also to provide opportunities for faculty and students to participate actively in research and frontier developments. At the same time an adequate cultural balance in the educational program will be preserved so that the students will gain broader perspectives and deeper understandings of the humanities and the business studies.



The rising enrollment has again placed severe demands upon our physical plant, necessitating new buildings and facilities. To satisfy these needs, a goal of \$5,500,000 was set for the development program. Over half of this goal has now been realized. A new dormitory with dining facilities for students and faculty has been financed jointly by a generous grant of \$250,000 from a trust created by George I. Alden and a Government loan of \$1,000,000. The Olin Foundation has provided a grant of \$1,229,000 to finance a new building with laboratories, classrooms, and offices for the physics department. Future plans also call for a central library to provide a pleasant study environment and a field house to accommodate the athletic activities. The generous contributions from alumni, friends, and industry toward this development program are an encouraging indication of their constant desire to see Worcester Tech maintain a position of leadership among the engineering colleges in the Country.



How does one measure the value of a college or university? Is it the industries which have been founded by the graduates and members of the faculty—companies which over the years have

grown in stature to take their places among the leading companies in the Country? Is it the thousands of graduates who, by virtue of their education, have contributed in great measure to the building of industry and the raising of the standards of living of the people? Is it the wholesome, progressive, and vitalizing influence which the faculty and students exert in the community? Is it the great human values which are implicitly woven into the lives of all those who share in the privileges of association with the institution?



Perhaps there is no adequate measure of the value of an educational institution, and quite properly we should not attempt to take its measure.



For the contributions of a college or university are the silent achievements which make men and nations great. They are the contributions which give man the capacity for great achievement, the vision of his purpose in life, and the hope for a better world!

THE END



*"Actorum Memores simul
affectamus Agenda!"*

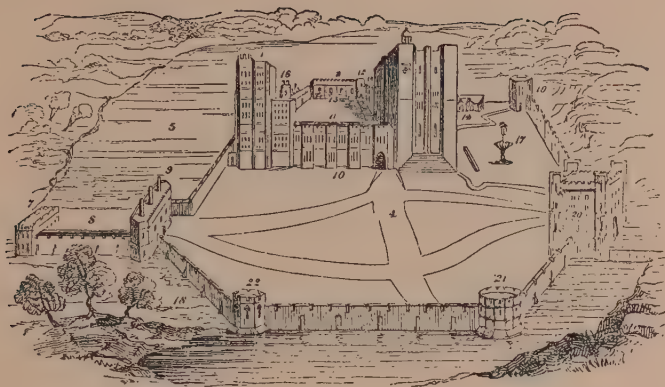




THIS NEWCOMEN ADDRESS, *dealing with the history of*
WORCESTER POLYTECHNIC INSTITUTE, *was delivered*
at the "1957 Massachusetts Luncheon" of The New-
comen Society in North America, held at Worcester,
Massachusetts, U.S.A., on September 19, 1957. DR.
BRONWELL, *the guest of honor, was introduced by*
PHILIP M. MORGAN, *President, Morgan Construction*
Company, Worcester; Chairman, Board of Trustees,
Worcester Polytechnic Institute; Vice-Chairman of the
New England Committee, in American Newcomen. The
luncheon was presided over by the SENIOR VICE-

PRESIDENT FOR NORTH AMERICA.





“Underlying a crescendo of industrial achievement there was also the triumph of a new adventure in higher education. For modern industry, with its intricate technology and its complex problems of organization and management, could never have been created on the scale of magnitude which we know today without the bold and adventurous pioneering of higher education in America.”

—ARTHUR BRONWELL





“Over a span of half a century, from about 1850 to 1900, a great rolling wave of enthusiasm for higher education spread throughout the Country, bringing into being most of our better-known, privately-endowed colleges and universities. It was the local minister, the industrial leader, the banker, the lawyer, and the doctor who wanted to build the cathedrals of opportunity in learning for their children and their children’s children so that they might live fuller and more creative lives.”

—ARTHUR BRONWELL





“The contributions of a college or university are the silent achievements which make men and nations great. They are the contributions which give man the capacity for great achievement, the vision of his purpose in life, and the hope for a better world!”

—ARTHUR BRONWELL





NEW ENGLAND, even during the 18th Century, has pointed a way: in inventive genius, industrial development, and productive resourcefulness! These characteristics, taken together, have comprised what often is termed: "Yankee Ingenuity." An institution, founded at Worcester in Massachusetts in 1865, nurtured by industrialists and dedicated to technology, has been conspicuous in its similar contributions to New England and to the Nation. We are happy to honor "W. P. I."





THE NEWCOMEN SOCIETY *in North America*

MORE THAN 30 years ago, the late L. F. Loree (1858-1940) of New York, then dean of American railroad presidents, established a group now known as "American Newcomen" and interested in Material History, as distinguished from political history. Its objectives center in the beginnings, growth, development, contributions, and influence of Industry, Transportation, Communication, the Utilities, Mining, Agriculture, Banking, Finance, Economics, Insurance, Education, Invention, and the Law—these and correlated historical fields. In short, the background of those factors which have contributed or are contributing to the progress of Mankind.

The Newcomen Society in North America is a voluntary association, with headquarters in Uwchlan Township, Chester County, within the fox-hunting countryside of Eastern Pennsylvania and 32 miles West of the City of Philadelphia. Here also is located The Thomas Newcomen Library, a reference collection open for research and dealing with the subjects to which the Society devotes attention.

Meetings are held throughout the United States of America and across Canada at which Newcomen Addresses are presented by leaders in their respective fields. These manuscripts represent a broadest coverage of phases of Material History involved, both American and Canadian.

The approach in most cases has been a life-story of corporate organizations, interpreted through the ambitions, the successes and failures, and the ultimate achievements of those pioneers whose efforts laid the foundations of the particular enterprise.

The Society's name perpetuates the life and work of Thomas Newcomen (1663-1729), the British pioneer, whose valuable contributions in improvements to the newly invented Steam Engine brought him lasting fame in the field of the Mechanic Arts. The Newcomen Engines, whose period of use was from 1712 to 1775, paved a way for the Industrial Revolution. Newcomen's inventive genius preceded by more than 50 years the brilliant work in Steam by the world-famous James Watt.



Members of American Newcomen, when in Europe, are invited by the Dartmouth Newcomen Association to visit the home of Thomas Newcomen at Dartmouth in South Devonshire, England, where the festival of "Newcomen Day" is celebrated each year on the anniversary, August 16th, of his death.



*"The roads you travel so briskly
lead out of dim antiquity,
and you study the past chiefly because
of its bearing on the living present
and its promise for the future."*

—LIEUTENANT GENERAL JAMES G. HARBORD,
K.C.M.G., D.S.M., LL.D., U.S. ARMY (RET.)
(1866-1947)

*Late American Member of Council at London
The Newcomen Society of England*



"Island Creek"

A Career Company
Dedicated to Coal

*Saga
In Bituminous!*

RAYMOND E. SALVATI



581

1957



"Were American Newcomen to do naught else, our work is well done if we succeed in sharing with America a strengthened inspiration to continue the struggle towards a nobler Civilization—through wider knowledge and understanding of the hopes, ambitions, and deeds of leaders in the past who have upheld Civilization's material progress. As we look backward, let us look forward."

—CHARLES PENROSE

*Senior Vice-President for North America
The Newcomen Society of England*



This statement, crystallizing a broad purpose of the society, was first read at the Newcomen Meeting at New York World's Fair on August 5, 1939, when American Newcomen were guests of The British Government

"Actorum Memores simul affectamus Agenda"

"ISLAND CREEK"
Saga in Bituminous!
Island Creek Coal Company
A Career Company Dedicated to Coal!

An Address at New York



AMERICAN NEWCOMEN, *through the years, has honored numerous industrial enterprises and in a wide variety of fields, both in the United States of America and in Canada. Such a Newcomen manuscript is this, dealing with the history of Island Creek Coal Company in the utilization of all-important mineral resources:*

Bituminous Coal!





“Tonight you honor Island Creek Coal Company—‘A Career Company Dedicated to Coal.’ I am privileged to have the happy opportunity to bring to this distinguished group a story of coal, machinery, and men.”

—RAYMOND E. SALVATI



"Island Creek"

A Career Company Dedicated to Coal!

Saga In Bituminous!

RAYMOND E. SALVATI

MEMBER OF THE NEWCOMEN SOCIETY

PRESIDENT

ISLAND CREEK COAL COMPANY

HUNTINGTON

WEST VIRGINIA



THE NEWCOMEN SOCIETY IN NORTH AMERICA
NEW YORK SAN FRANCISCO MONTREAL

1957

Copyright, 1957
RAYMOND E. SALVATI



*Permission to abstract is granted
provided proper credit is allowed*



*The Newcomen Society, as a body,
is not responsible for opinions
expressed in the following pages*



*First Printing: September 1957
Second Printing: September 1957*



This Newcomen Address, dealing with the history of Island Creek Coal Company, was delivered at a National Newcomen Dinner of The Newcomen Society in North America, held in Ballroom of The Pierre, at New York, N.Y., U.S.A., when Mr. Salvati was the guest of honor, on September 26, 1957



SET UP, PRINTED AND BOUND IN THE UNITED STATES
OF AMERICA FOR THE NEWCOMEN PUBLICATIONS IN
NORTH AMERICA BY PRINCETON UNIVERSITY PRESS





INTRODUCTION OF MR. SALVATI, AT NEW YORK ON SEPTEMBER 26, 1957, BY T. F. PATTON, PRESIDENT, REPUBLIC STEEL CORPORATION, CLEVELAND; MEMBER OF THE CLEVELAND COMMITTEE, IN THE NEWCOMEN SOCIETY IN NORTH AMERICA.

My fellow members of Newcomen:

OUR guest of honor tonight, Raymond E. Salvati, a West Virginian by birth and a coal man by profession, is a dynamic embodiment of the principles and philosophies underlying the opportunities of America.



Ray Salvati was born of humble parentage in the little mining town of Monongah, West Virginia. The story of his life, if it could be told here in detail, would equal if not surpass any of the famous Horatio Alger series. Horace said: "Adversity has the effect of eliciting talents which in prosperous circumstances would have lain dormant." Our guest has proved the wisdom of these words. Those who knew Ray during his college days take pride in telling stories of his determination to complete his education and of his many and varied efforts to provide the required tuition.



He was graduated from West Virginia University in 1922, with a Bachelor of Science degree in Mining Engineering. Several days after graduation he began his mining career, when he accepted employment as a day laborer laying track in one of the mines of Island Creek Coal Company. Within a very few months, despite his youth, he was assigned a position of responsibility. Four years later, he was promoted to the position of General

Manager of several sizable mines, and, within ten years after joining the company, he was elected a Vice-President. Year after year he became responsible for more of the Company's activities and, in 1949, twenty-seven years after joining the Company, he became its President.



While still in the midst of his meteoric career of success in the Coal Industry, Raymond Salvati finds time to contribute valuable and efficient service to many Governmental, civic, professional, and charitable causes, and maintains active interest in various societies, institutions, and associations. Since 1945, he has been a member of the Board of Governors of West Virginia University, and on two separate occasions has been elected President of the Board. He is a Director of many organizations, including National Association of Manufacturers, National Coal Association, and American Mining Congress.



Gentlemen, I am honored to present to you my good friend and fellow member of Newcomen, a man whom I consider an industrial leader of distinction and a credit to the American way of life: RAYMOND E. SALVATI.





My fellow members of Newcomen:

TONIGHT you honor Island Creek Coal Company—"A Career Company Dedicated to Coal." I am privileged to have the happy opportunity to bring to this distinguished group a story of coal, machinery, and men.



It is interesting, *Mr. Chairman*, to observe that Thomas Newcomen, commemorated by The Newcomen Society, developed the first steam engine for use in England's coal mines, without which it is said the mines would have been unworkable and England's history would undoubtedly be different from that recorded.



Coal first was mined commercially in America about 1745 near Richmond, Virginia, but for years the American Colonies imported most of their coal from England. Today the reverse is true—England and other European countries are importing coal from America.

Production of coal in the United States of America more than doubled *each decade* from 1860 to 1900—at which time American mines were producing 212 million tons and then outproducing the former world-leading British coal mines.



With the turn of the Century we begin our story of Island Creek and its place in the American coal industry during the past half century.



Four men shaped Island Creek and the history of the company. Who were these four men? I present them in their order of appearance in Island Creek's history:

Our story begins in 1895 in the Boston office of William H. Coolidge, son of a well-known Massachusetts family. Mr. Coolidge was a dominant force, along with other notable New Englanders, in a new venture backed by New England capital, known as United States Oil Company. The company was profitable for several years, but the report issued for the year ended September 30, 1901, gave indication that all was not going so well with the oil business and that some action was necessary to protect the investment of the stockholders.



During the interim 1895 to 1900, through other interests including the highly successful United States Smelting, Refining and Mining Company, Mr. Coolidge had become associated with Albert F. Holden, whose family owned the *Cleveland Plain Dealer*. Each admired and trusted the other. In combination they had the attributes of an unbeatable team.



Coolidge and Holden set out to solve the problems of the United States Oil Company in 1901. Through Z. Taylor Vinson, a lawyer in Huntington, West Virginia, they heard of a large coal outcrop near a stream called Island Creek, in Logan County, southern West Virginia. At that time the property was a wilder-

ness, concerning which a story survives that Holden and Coolidge, when they finished tramping over the property, retired to their tent, donned dinner coats, and gentlemen to the core, ate dinner in isolated elegance.



Backed by New England capital, which is still important to the company, they bought the property, consisting of approximately 30,000 acres estimated to contain more than 300 million tons of high quality bituminous coal. The property was conveyed to the United States Oil Company and the company's name was changed to United States Coal and Oil Company. Its capital stock was \$6 million and it had no bonds. In 1904, the decision was reached to dispose of all oil holdings and this was accomplished early in 1907. The company set out to make coal its career—and so it has continued for more than fifty years.



Active development of the coal properties began in September 1902 under direction of Mr. Holden, and his technical and administrative abilities and experience played an all-important part in the early growth of the company. He distinguished himself as our first President, which position he held at the time of his death on May 18, 1913. The town of Holden, West Virginia, to be discussed later, stands as a tribute to his accomplishments. From 1902 to 1915, coal was produced and sold from these properties under the name of United States Coal and Oil Company, and through a plan of reorganization in 1915, the company became known as Island Creek Coal Company.



When Mr. Holden assumed the responsibility for developing the Island Creek properties—always consulting and advising with Mr. Coolidge who continually served as Chairman of the Board until his retirement in 1934—he found himself in an area of Logan County, West Virginia, with a population of less than 100. The area referred to is one county removed from the Kentucky border, and is famed as the feud country where the McCoys warred with the Hatfields. Here in the center of the company's

land holdings, Mr. Holden was to build the town named in his honor, as the hub of Island Creek's operations.



While the town and necessary structures were being built, as well as the five-mile company-owned railroad to link with the as yet uncompleted Chesapeake and Ohio system, it became necessary to provide transportation to bring in the needed machinery and equipment. This was accomplished by building a 12-mile road, much of it corduroyed, to Dingess, West Virginia, a point on the Norfolk and Western Railway. Seventeen ox teams provided the motive power for the mountainous overland movement from rail siding to plant site.



The town of Holden, West Virginia, with its present population of 10,000, still serves as hub of our operations and, because of its careful planning and completeness of facilities, is often referred to as the model town of the southern coal fields.



At the time development work commenced in 1902, Mr. Holden stated that in his opinion it would take five years to put the property on a paying basis. It is interesting to note that in his annual report for the year ended June 30, 1907, he made the statement that: "These five years have now passed and during the last six months your properties have shown a profit for the first time." Since that time Island Creek has shown a profit each year.



With Mr. Holden's death in 1913, Island Creek suffered a most serious loss, but due to the talent at the top in the persons of T. B. Davis and James D. Francis, the company was well equipped to carry on.



Mr. Davis was a West Virginian by birth and a Yale graduate. Entering the coal business immediately after college, he already had participated in organizing and operating several coal com-

panies before he came to Island Creek in 1907 as a Vice-President. He became President upon Mr. Holden's death, and succeeded Mr. Coolidge as Chairman of the Board of Directors in 1934, which position he held until his death in 1948. His 41 years with Island Creek were filled with accomplishment, and he perpetuated many of Mr. Holden's policies. Mr. Davis was a very keen business man, possessed of an engaging personality and a phenomenal memory, and he gave strict attention to every phase of the company's business.



Mr. Francis, a Kentuckian by birth and a graduate of the University of Virginia, became associated with Mr. Davis in 1911, when he was first retained as counsel. Possessed of degrees in both law and engineering, he was Mr. Davis's closest business associate, and was elected a Vice-President in 1918. In 1934, he succeeded Mr. Davis to become Island Creek's third President.



Mr. Francis's achievements are well known. He is widely recognized as one of the coal industry's outstanding leaders, and throughout the years, his immense capabilities have been of service not only to Island Creek and the southern coal industry, but to the entire industry as well. His advice was constantly demanded by the industry in coping with its problems during the National Recovery Administration ("N.R.A."), the several Guffey Coal Acts, Government seizures of America's coal mines, and on many other occasions when similar problems arose. I succeeded Mr. Francis as President in 1949, and he became Chairman of the Board.



Mr. Francis concluded his dynamic career with Island Creek upon his retirement in 1952. Over the years, many honors came to him in recognition of his great contributions to his company and the industry. Honorary degrees were conferred upon him by several colleges and universities, and, in 1951, he received the Charles F. Rand Medal from the American Institute of Mining and Metallurgical Engineers for "distinguished achievement in mining administration."

Thus, four men—Coolidge, Holden, Davis, and Francis—and the men with whom they surrounded themselves, are responsible for Island Creek's first half century record of accomplishments, a record which must be regarded as exceptional. I should also like to mention one other man, A. R. Beisel, whom I succeeded as General Manager of Island Creek operations, in 1936. His teachings served me well in my years of association with Mr. Davis and Mr. Francis.



During the history of the company, Island Creek's management always has been inspired by the exceptional support, counseling, and untiring efforts of its Directors. To these men, past and present, we of management owe much, and to them we pay tribute and acknowledge the value of their guidance.



I was privileged to become an Island Creek employee upon graduation from college in 1922. My first job was that of a day laborer laying underground track. During my college days I had heard much of the accomplishments and plans of Island Creek and its leaders, and I can assure you I have seldom experienced the elation that was mine the day I got the job. As I progressed with the company I learned more and more of its determination to adhere to its basic philosophies of progressiveness in mining, marketing, labor, and public and financial relations.



When the first Island Creek coals were offered on the market in 1904, they were readily accepted in the fast-growing industrial areas north of the Ohio River, as well as by the household users and the rapidly expanding railroads in the same area. Later they became widely accepted in eastern Canada, Virginia, the Carolinas, and by New England consumers in all categories of use.



Island Creek and its neighboring producers in the southern coal fields had much in their favor, including coals of superior quality and preparation. As a result, most of the industrial, electric utility,

and gas plants built in the aforementioned areas were designed to use southern coals advantageously. This ready acceptance of southern coals and Island Creek coals in particular is graphically demonstrated by the fact that despite the business depression dominating 1908 (following the famous financial panic of 1907), Island Creek's sales that year were 30 percent higher than in 1907.



Throughout the years, Island Creek has experienced the rigors of competitive selling. Having no home market as such, its products invariably pass the doors of competitors to reach its consumers. Its outlets often have been threatened by such factors as government controls, wartime rationing and allocations, higher freight rates, railroad car shortages, inroads of competitive fuels, technological improvement in consumption and use, and dieselization of railroads. Many markets once prized have disappeared completely. Markets once denied or unknown are among those most highly valued today. Over the years, we have carefully geared all our market efforts to the ever-changing times, striving always for constructive growth in both production and sales.



Since 1907, Island Creek—in an industry with a history of losses—has always operated at a profit, and its management holds steadfastly to the determination that its problems must be solved without marring this record. We still live by the precept that profits and progress are inseparable.



In the beginning, most of Island Creek's employees were immigrants recruited from Ellis Island, and today many of our most valued employees are third generation descendants of these early associates.



For these early workers it became necessary that the company provide not only the tools of trade, but the necessities of life, encompassing all its phases—spiritual, cultural, recreational, and physical. These needs demanded the supplying of homes, schools,

churches, stores, water, heat, light, food, medicine, hospitals, fire and police protection, and all the community activities we so readily accept in any town today without once asking how and whence they came.



Confronted by these necessities, Island Creek had to become a specialist in many lines of endeavor and to provide all necessary community services. As early as 1908, the Island Creek communities were recognized, as they are today, as good places in which to live and work. We had much to offer our employees in comparison with other communities, and our wage scale and living conditions were generally higher than average. Further, because of the growth trend of the company, steady work and promotional opportunities were better than average.



The severe economic Depression of the early 'Thirties dealt heavy blows to the bituminous coal industry. Demand and production dropped more than 40 percent, competitive necessity drove prices to levels below average cost, many mines were forced into bankruptcy or abandonment, and profound distress afflicted the coal-producing regions. While Island Creek was able to continue operations at a profit, the management realized that some drastic action was necessary to preserve its position as a leader in the industry. This drastic action would have to take the form of reduced operating costs and of increased market acceptability of the coals produced. Decision was made to abandon hand-loading of coal into mine cars and to install mechanical loaders at working faces. This meant full seam mining and the bringing to the surface of impurities formerly left underground by the miner. It also meant that expensive mechanical sizing and cleaning plants would have to be installed. The program meant a complete revolution in production, preparation, and marketing operations of the company.



The whole program would cost many millions of dollars and fortunately the money was available. The management of the company had prudently accumulated a very substantial liquid

surplus from the profits of the 'Twenties, and this money was now employed to produce further profits.



Much pioneer work was done by Island Creek's engineers and operating personnel in perfecting both mechanical loading machines and coal sizing and cleaning devices, which at that time were relatively new and unproven. The program also required much advance planning, but it was begun in 1934 and was pushed vigorously. It was completed as to all mines in 1939. In that year, Island Creek was, in effect, a brand new company and was far out in front of its competitors in its underground mining operations and in its ability to produce in volume the sizes and qualities of coals needed by its customers.



Along with these modernizations we moved into the field of specialized selling, for which our sales force was revamped substantially and expanded to include sales engineers trained in the field of combustion and in proper application of fuels with maximum benefit to the consumer. Prior to these modernizations, Island Creek, as with most coal producers, had only a limited number of coal sizes available. Our revolutionary aboveground processing plants enabled us to offer the consuming market more than *100 sizes*, and the technical skills then present in our selling organization enabled us to prescribe for any given plant the particular grade, size, or blend of coal that could best serve its needs. This we called our "selective application" plan which brought great benefits to coal consumers, through proper selection and application of coals and, down through the years, resulted in fuel savings totaling many millions of dollars.



By these means, in both production and sales, Island Creek was able to continue its growth.



Since 1939, we have continued our search for improved means of mechanization in both mining and preparation; thus, the mod-

ernizations accomplished prior to 1939 have become archaic by comparison with the machinery and methods employed today. In fact, faced by the necessity of offsetting increased labor costs, at least in part, the industry has accomplished so much in technological improvements within the past several years that equipment regarded as modern but a few years ago is obsolete. We have remained ever alert to developments in all categories of mining which would be adaptable to our own operations.



I could cite many other instances in which Island Creek has pioneered in the interest of improved products, improved customers' services, and lower cost, all designed to increase profits. We are constantly and actively seeking ways to do something better tomorrow than we do it today.



So far, I have not commented on the matter of reserves. It is our basic philosophy that one engaged in an extractive industry can, without proper vision, acquire too many reserves and, in effect, become land poor. This we have carefully avoided, but at the same time, by proper planning we have continually added sufficient coal acreage to our reserves to more than offset extraction. This has been accomplished by the acquisition of several landholding companies, by acquisition of other companies, by the direct purchase of various parcels of land, and by leasing acreages adjacent to our own holdings.



To begin a summation of Island Creek as it is constituted today, we commence with the matter of reserves. Our estimated unmined recoverable coal exceeds 560 million tons, as compared to the 285 million tons already mined during the history of the company. This figure excludes certain acreages we presently hold under option to lease and certain leased acreages not yet sufficiently proven to be included in our minimum reserve figures; nor does it include reserves of thin seam coals once regarded as unmineable, but which with modern-day equipment can, or may in the

near future, be profitably mined. Thus, Island Creek is assured a life from its present holdings well beyond the next half century.



Our relations with our 7,000 employees are of the best. Today's miner is a skilled individual and his working tools consist of complicated machinery and equipment worth thousands of dollars, all activated by push-button controls.



Thanks to the progress of man, the American standards which permit one, and often two, automobiles in every worker's garage, and the excellent highways now traversing our mining areas, our people are as close to the city way of life as they are to their television sets, radios, and magazines. No longer must we as a company provide and foster the necessities of well being. The thousands of homes we once were required to provide on a rental basis have almost all been sold to individuals. Water, gas, electricity, and telephone service, once the responsibility of the company, are now provided by public utilities. All that remain of our original community activities are our retail stores which are competitive in every respect with the chain stores serving the same areas.



The last decade has witnessed substantial increases in wage levels and in the prices of mining machinery and supplies. But, because of competitive factors, the prices of coal have held fairly level, so that, in fact, the industry has absorbed most of the higher wages and costs. It has accomplished this very unusual result by a steady increase in productivity per man-shift. During the decade, such productivity has almost doubled on an industry-wide basis. Island Creek has consistently done much better than the average of the industry.



This gain in productive efficiency has not been bought cheaply. It has come about by the installation of new and more efficient machinery and by the ruthless scrapping of old equipment long

before it is worn out. The obsolescence factor in mining machinery is indeed high.



The new machinery is invariably more costly than the machinery replaced. Indeed, the cost of supplying tools to the modern miner is rising to fantastic heights. To equip a face section crew, varying in number from six to twelve men, with the latest machinery for underground mining will cost from \$160,000 to \$200,000. The installation of a new mine today involves a capital cost up to \$10 per ton of annual capacity. (Thus, a mine with a capacity for producing a million tons a year will cost up to \$10 million to install.) Such capital costs can be supported only if there is a steady increase in productive efficiency.



It is the belief of Island Creek's management that the opportunities for increased productivity are by no means exhausted. It plans at all times to use only the best and most efficient equipment as it comes on the market, and it anticipates a continued steady growth in output per man-shift.



There have also been significant changes on the consumer's side, the chief of which is a pronounced growth in the size of coal-consuming plants. For example, one electric generating plant in the Ohio Valley will burn more than 3 million tons of coal a year. Some individual coke plants of steel companies will consume millions of tons of coking coal a year. Such large consumers demand coal of uniform size and quality shipped in a steady volume backed by reserves, and this demand can be met only from large mines equipped with the very best of sizing and cleaning plants.



The constantly higher capital costs of efficient mines and the necessity of supplying larger tonnages of uniform size and quality in steady volume to individual customers are the basic economic factors which are today promoting the installation of larger mines and the growth of larger corporate units. Only the large, well-

financed companies can reasonably expect to meet the growing market requirements of the future. A number of mergers already have occurred in the coal industry and some individual companies have shown a rapid growth in tonnage produced. This growth in size of individual coal-producing companies is a necessary and healthy process, and it may be expected to accelerate in the years to come.



Island Creek is alert to the desirability of its own growth. It is planning to increase its tonnage production by opening new mines on lands now controlled or under option and, when profitable, by gradual acquisition of additional properties. Its policy is not to grow merely for the sake of growth, but only when it can increase the value of its services to its customers and improve its earnings for the benefit of its stockholders.



Our products now move in sizable quantities to the general industrial, metallurgical, utility, and export markets. We anticipate increased sales in each of these markets in the years ahead, and are forecasting that metallurgical, utility, and export demands will provide our major growth opportunities. Over 80 percent of our present-day reserves are premium coals qualified to serve the metallurgical market, and a substantial portion of our present production is already serving these needs.



Another important outlet for Island Creek products is the retail dealer. We regularly sell to more than 1,500 of them. It is true this market has suffered substantial volume shrinkage in recent years, but on an industry-wide basis, more than 50 million tons of bituminous coal is still sold through retail dealers each year and much coal will continue to be placed through these channels.



The company has several profitable subsidiary activities, including its 43 stores in the mining fields. It is also engaged in the transporting of coal on the Ohio River—an activity dating back

to 1906—and presently operates four diesel towboats and 132 barges of 1,000-ton capacity. This is an important adjunct to its business in transporting its quality coals to the steel plants in the Pittsburgh area, as well as down river to Cincinnati and other points.



Through a subsidiary, Island Creek owns a large, well-located dock at Duluth, Minnesota. Coal is shipped to this dock from lower lake ports by lake vessels and redistributed to an extensive area.



Island Creek is now second in dollar sales and third in annual production among the commercial coal operators in this Country. Its daily output can best be visualized by picturing, if you will, a train of loaded coal cars ten miles long. That is the tonnage that leaves Island Creek's coal mines each working day.



Our operating, administrative, sales, research, financial, and executive personnel are professional in quality and officials are chosen for their personal qualifications and abilities. The officers and top executives average 50 years of age. Our operating management averages 42 years of age and has an especially high average educational achievement in specialized fields of endeavor. The average age of our sales organization is 40 years. It has always been the policy of the company to treat its management personnel well, but not extravagantly. It puts emphasis upon incentive pay and promotion from within, so that good work is recognized and rewarded.



As evidence that this form of management has paid off, I mention that Island Creek has a forty-five-year record of dividends, and since the initial development period has never had a loss year. During its life, including the first half of 1957, Island Creek has recorded net profits in excess of \$146 million and paid cash dividends of \$103 million. In addition, it has so far generated

internally the money needed for replacement and expansion and has no funded debt at this time. Its current ratio is excellent.



Well, there you have, in brief, *The Story of Island Creek*. It is a story typically in the American tradition of venturesome private enterprise. Resourceful and intelligent businessmen were willing to risk their capital in developing a large new mining operation in a region that truly was a wilderness. The pioneering spirit of the founders has been transmitted to their successors. The result is a company which, in my humble opinion, is outstanding in all respects in the bituminous coal industry.



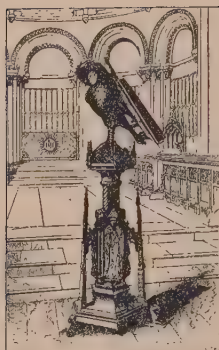
Tonight, we have dealt with the past. But Island Creek's management is concerned only with the future. It is determined to maintain Island Creek's position of leadership in the coal industry. In short, it is determined to live up to its motto:—*A Career Company Dedicated To Coal!*

THE END



*"Actorum Memores simul
affectamus Agenda!"*





THIS NEWCOMEN ADDRESS, *dealing with the history of*
ISLAND CREEK COAL COMPANY, *was delivered at a*
National Newcomen Dinner of the Newcomen Society
in North America, held at New York, N.Y., U.S.A., on
September 26, 1957. MR. SALVATI, the guest of honor,
was introduced by T. F. PATTON, President, Republic
Steel Corporation, Cleveland; Member of the Cleveland
Committee, in American Newcomen. The dinner was
presided over by the SENIOR VICE-PRESIDENT FOR
NORTH AMERICA, *in this inter-*
national Society.





“In what I have said tonight we have dealt with the past. But Island Creek’s management is concerned only with the future. It is determined to maintain Island Creek’s position of leadership in the coal industry. In short, it is determined to live up to its motto:—A Career Company Dedicated To Coal.”

—RAYMOND E. SALVATI





SAGA IN BITUMINOUS! *In the pages you have read is the life-story of Coal Mining Operations during more than half a century: Island Creek Coal Company. It is the colorful narrative of the life and efforts and contributions of the Founders: their vision, courage, initiative, resourcefulness, determination, and hard work—and likewise of those who have followed them in carrying on the Company's operations. It is these same characteristics which have made American Industry what it is today—in whatever field!*



78
"S. S. Kresge Company"

And Its Builder

Sebastian Spering Kresge

STANLEY S. KRESGE





"Were American Newcomen to do naught else, our work is well done if we succeed in sharing with America a strengthened inspiration to continue the struggle towards a nobler Civilization—through wider knowledge and understanding of the hopes, ambitions, and deeds of leaders in the past who have upheld Civilization's material progress. As we look backward, let us look forward."

—CHARLES PENROSE

*Senior Vice-President for North America
The Newcomen Society of England*



This statement, crystallizing a broad purpose of the society, was first read at the Newcomen Meeting at New York World's Fair on August 5, 1939, when American Newcomen were guests of The British Government

"Actorum Memores simul affectamus Agenda"

"S. S. KRESGE COMPANY"
And Its Builder
Sebastian Spering Kresge
An Address at Detroit



AMERICAN NEWCOMEN, through the years, has honored numerous corporate enterprises and in many fields, both in the United States of America and in Canada. Tribute has been paid likewise to the vision, courage, initiative, resourcefulness, and hard work of the Founder or Founders of these many organizations. Such a Newcomen manuscript is this, honoring S. S. Kresge Company and its nationally-known Founder.





“The story of my father and the business that he built has a very familiar ring. It is as American as New England and as earthy as common toil. It is a story repeated in a hundred different forms by men who had the same dreams and the same vision as my father, the same dogged determination, the same sense of values—and lastly, but most important, the same fine sense of timing—or the ability to recognize that the time was ripe for the fulfillment of their ambitions.”

—STANLEY S. KRESGE



“S. S. Kresge Company”

And Its Builder

Sebastian Spering Kresge

STANLEY S. KRESGE

MEMBER OF THE NEWCOMEN SOCIETY

VICE-CHAIRMAN OF THE BOARD

S. S. KRESGE COMPANY

DETROIT

MICHIGAN



THE NEWCOMEN SOCIETY IN NORTH AMERICA
NEW YORK SAN FRANCISCO MONTREAL

1957

Copyright, 1957
STANLEY S. KRESGE



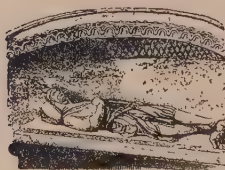
*Permission to abstract is granted
provided proper credit is allowed*



*The Newcomen Society, as a body,
is not responsible for opinions
expressed in the following pages*



*First Printing: October 1957
Second Printing: October 1957*



*This Newcomen Address, dealing with the his-
tory of S. S. Kresge Company and with the
life and work of its Founder, Sebastian S.
Kresge, was delivered at the "1957 Michigan
Dinner" of The Newcomen Society in North
America, held in Ballroom of The Sheraton-
Cadillac, at Detroit, Michigan, U.S.A., when
Mr. Kresge was the speaker,
on October 8, 1957*



SET UP, PRINTED AND BOUND IN THE UNITED STATES
OF AMERICA FOR THE NEWCOMEN PUBLICATIONS IN
NORTH AMERICA BY PRINCETON UNIVERSITY PRESS





INTRODUCTION OF MR. KRESGE, AT DETROIT ON OCTOBER 8, 1957, BY FRANKLIN P. WILLIAMS, PRESIDENT, S. S. KRESGE COMPANY, DETROIT; MEMBER OF THE MICHIGAN COMMITTEE, IN THE NEWCOMEN SOCIETY IN NORTH AMERICA.

My fellow members of Newcomen:

As President of the organization, whose 90-year-old Founder and Builder, and whose distinguished son you are honoring tonight, I feel that I have been accorded a special privilege in being permitted to introduce our speaker and honor guest. The story he will tell is the saga of the pioneering, growth, and success of his father—the merchandising genius who had the vision, the ability, and the energy required to build America's second largest chain of variety stores. It is, of course, the life-story of Sebastian Sperring Kresge, and the institutions he created over a period of 60 years.



It is our privilege to hear that story from the lips of his son, whom we honor tonight, not alone as the very active second-in-command in the Kresge enterprise, but as a Christian, God-fearing citizen who has accepted the challenging responsibility for distributing the increments of Kresge family wealth for the betterment of Mankind.

Our speaker this evening was born in Detroit on June 11, 1900. He attended the Fairbanks Grade School and was graduated from old Central High School in 1918, where he qualified for the "Honor Society" as well as the football, baseball, and track teams. He enrolled in the University of Michigan in 1918, joined the student army training corps and fell victim to the worst of the 1918 Flu epidemic and dropped out of school for that semester. He was initiated in Beta Theta Pi fraternity, March 30, 1920. In January 1922, he transferred to Albion College, where he had two seasons of baseball and one of football on the Varsity Squad. He was graduated in June 1923.



In the tradition of the Kresge organization he was "company trained," and worked for several years in our stores, as trainee, assistant manager, and manager. He came into the Sales Department at the Kresge offices in 1930 and later worked in various training capacities including buying. In 1937, he became Assistant to the then President, R. R. Williams. In 1943, he was made Assistant Secretary and, in 1950, he became a Director of the corporation. In 1951, he was elected Vice-President and Administrative Assistant to the President. In May 1953, he was elected Vice-Chairman of the Board. He is also a member of various corporation committees.



In the Kresge Foundation he was elected a Trustee and became Vice-President in 1930. In 1952, he was elected President of the Foundation, to which he gives not only a great amount of his time but of his heart and soul.



He is an active member, a Trustee, member of the official Board and Finance Committee of Metropolitan Methodist Church, a trustee of Albion College, and a director of the Boys' Clubs of Detroit.



Early this year he was honored as "Layman of The Year 1956" by the Detroit Council of Churches. He also is a devoted

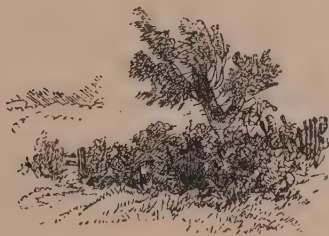
family man, with a deeply devoted wife, Dorothy, and three sons, Walter H., Stanley S., and Bruce A. He also is 7 times a grandfather.



But most of all, he is our friend, and co-worker, confidant, and most understanding link to the genius who brought about the institution of which we are about to hear more this evening.



Gentlemen of Newcomen: It is my great pleasure to present the Vice-Chairman of the Board of Directors of the S. S. Kresge Company: STANLEY S. KRESGE.





My fellow members of Newcomen:

IN 1953, when my father, Sebastian S. Kresge, was asked to make a response at the dedication of Kresge Hall at Harvard's Graduate School of Business, he made what was probably the shortest speech in the history of Harvard University. These were his words—just six of them with a total of eight syllables: “I never made a dime talking!” Then he sat down. He was coaxed to expand his remarks, but the words that are remembered are the first six words.



With your indulgence, *Mr. Chairman*, I think I could state that those six words were significant, perhaps, in three different dimensions. They spell out an ingrained passion for economy that characterizes the founder and builder of the S. S. Kresge Company. They focused attention on the importance of the dime and my father's deep respect for small things in the evolution of our business. And finally, by sheer contrast, they emphasized his vision in big things—for the six words each represented a contribution of over \$375,000 from The Kresge Foundation to the Graduate School of Business Administration of Harvard University. Indeed, what I have covered in this brief introduction to my subject tonight might even be considered a capsule history of the S. S. Kresge Company.

Since my subject for this evening is the story of the S. S. Kresge Company and its builder, Sebastian Spering Kresge, I think I should say at the outset that the history of the Company is linked to a large extent to the personal history of my father, as you will note as our story unfolds. What our Company is today he started, nurtured, and guided with a firm hand. What it is and what it does has his approval and blessing. He is still Chairman of the Board at the age of 90 years.



The story of my father and the business that he built has a very familiar ring. It is as American as New England and as earthy as common toil. It is a story repeated in a hundred different forms by men who had the same dreams and the same vision as my father, the same dogged determination, the same sense of values—and lastly, but most important, the same fine sense of timing—or the ability to recognize that the time was ripe for the fulfillment of their ambitions.



I emphasize this last point because it takes only a cursory look at our economic history to discover that the last half of the Nineteenth Century set the stage for the developments of our wonderful Twentieth Century. This was the period which gave birth to our ability to produce.



With imagination unfettered, slowly but surely, American ingenuity began to find ways for making new things and ways to distribute them, and simultaneously, the American People acquired a desire to have these new things, which were, despite their frequent crudeness, an improvement over the things which people had used in the pioneer days when the first necessity was to tame the wilderness.



It is not mere accident that the last half of the Nineteenth Century saw the beginnings of America's department stores, its first grocery chains, its first 5 and 10 cent stores. The time *was* ripe. Mass public transportation was begun. Commercial freight began moving by a national network of rail facilities. Eli Whitney and

a few other pioneers had discovered the ways to achieve mass production. The electric motor was developed. The progenitors of our modern automation were launched on their inspired way.



The roadblocks over these years were many. Among them, the Civil War, the Reconstruction Period, the Depressions of the '70's and the '90's, not to mention lack of capital for entrepreneurs. But, on the whole, there was an atmosphere highly charged with challenge that beckoned to men of faith to give their all to some new venture. America was growing and the future looked good.



Into this atmosphere, my father was born, in 1867, at Bald Mount, Luzerne County (now Lackawanna) Pennsylvania, nine miles from the city of Scranton. Even then Pennsylvania was mineral rich with its coal and ores, and 1859 was the year that oil was discovered at Titusville.



However, my grandparents were not miners, but simple Pennsylvania Dutch farmers whose ancestors had come there from Switzerland in 1745. Wrestling a living from the soil was not only hard work, but disappointingly unpromising, and my father made his decision while still very young that farming was not for him. In fact, he made a pact with his father—whose name was also Sebastian—that he would turn over all his earnings above the cost of board and clothing to his parents, at whatever job he got, until he was 21, if they would help him to attend an academy and technical school in the area. The only provision was that he was to retain his earnings from his first investment, which was a colony of 32 hives of bees which he had developed from a single hive as a boy.



The pact was made and kept. At eighteen, after attending Fairview Academy, he was attending the Polytechnic Institute near home. Following this, at 19 years of age, his first job was as a country school teacher at \$22 a month. One year of this was enough. Business attracted him and a grocery store in Scranton

started him off at \$28 a month. When it was time to go home and help with the Spring planting he was making \$40 a month. This experience convinced him he needed special business training, and with his savings from his bees he enrolled in Eastman's Business College at Poughkeepsie, New York.



Later, with this preparation behind him, and now 21 and on his own, he began exploring the business field, taking various jobs to learn all he could—house-to-house selling, insurance, book-keeping—for a short time a half interest in a bakery, and finally a job “on the road” selling tinware for W. B. Bertels Sons & Company of Wilkes-Barre. He took this job on a straight commission arrangement and for five years, with the addition of non-competing side lines, he traveled the northeastern quarter of the United States of America and by dint of persevering thrift he saved \$8,000.



But perhaps as important as the nest egg he had acquired, was what he had observed in these five years. From his selling contacts, he knew intimately such men as Frank W. Woolworth, who started with his first 5-cent store in 1879 in Lancaster, Pennsylvania. By 1882, this Woolworth store had become a *five-and-ten-cent* store. By 1886, Woolworth had seven stores in operation, and at the turn of the Century his chain had reached a total of 59 stores. My father had sold Woolworth a great deal of merchandise over the years and made it a point to know what was selling and how the business was conducted. In 1896, he tried to become a partner with Woolworth but did not succeed in doing so. In the light of subsequent events, I'm satisfied that this was a very sound decision on Mr. Woolworth's part!



There were several others who were getting started about this time, among them S. H. Kress, who developed his early stores largely in the South; Holmes, Tolle & Evans who were in later years to be absorbed by our company; but in particular there was John G. McCrory who was to become my father's first partner in

the 5 and 10 cent store business. Of course there were many other pioneers in other fields, such as the Great Atlantic and Pacific Tea Company, the first chain, founded in 1859; the Grand Union Tea Company; the National Tea Company; and Jewel Tea Company; J. C. Penney; Sears, Roebuck; the Melville Shoe Corporation; and the G. R. Kinney Company, founded all the way up to the turn of the Century. All of these became major national distributors in this Century—except for the “A & P,” which already had a head start in the last Century.



To get back to John G. McCrory whom we just mentioned. He had six bazaar stores in small Pennsylvania towns and two five-and-ten-cent stores in Johnstown, Pennsylvania and in Jamestown, New York. These latter two stores looked good to my father. He talked to Mr. McCrory about a partnership and received a favorable response. He quit his tinware selling and went into the Jamestown store to learn the business. The manager of that store was G. C. Murphy who was later to become an important figure as head of his own chain of variety stores. From Mr. Murphy, my father learned a great deal about operating a business. After a short but intensive training period he went to Memphis, Tennessee, in March 1897, to open a store as an equal partner with Mr. McCrory. The South was new territory. He had managed this store for 16 months when the partners decided to open a store on Woodward Avenue in downtown Detroit. G. C. Murphy was appointed the manager but, in March 1899, Mr. Murphy decided to start his own business, and my father came to Detroit to take over the management of the Detroit store. The business flourished. His experience in the hardware business provided new lines and outlets. Later, in 1899, he traded his half-interest in the Memphis store for full ownership in the Detroit store. This cost him an extra \$3,000 because of the larger Detroit inventory and necessitated the borrowing of funds—his first bank loan. From this point forward he was completely on his own.



My parents were married in Memphis in 1897, when my father was 30 years old. When they came to Detroit, in 1899, they de-

cided to make this their home. Things were beginning to happen in Detroit—Henry Ford and Charlie King had driven horseless carriages on the streets of Detroit and the talk and bustle around town concerning automobiles was getting very exciting—even if there was a hint of hard times and a war with Spain to cloud the picture of the 1890's. J. L. Hudson had built an 8-story department store building at Farmer and Gratiot.



Since the Year 1899 was the real beginning of the S. S. Kresge Company—the first two business years having been a partnership with McCrory—it might be interesting to set the stage a little further so that we have the proper perspective.



William McKinley was President of the United States. Ford's Detroit Automobile Company had been organized the year before and in two years produced two cars. The Olds Motor Works was organized and the first Packard car was built.



Sir Ronald Ross proved that malaria was transmitted by mosquitoes. Marconi transmitted the first wireless messages over the English Channel. The automatic computing scale was invented by Allen de Vilbiss of Toledo. The first canned soup and rubber heels reached the market. The vacuum cleaner was invented.



Evangelist Dwight L. Moody was drawing huge crowds in Detroit and Edgar A. Guest began writing poems for the *Detroit Free Press*.



Round steak was 13¢ a pound, bacon 14¢, and butter 26¢, bread 5 cents a loaf. The average wage for labor was \$1.62 per day.



I think it might likewise be interesting to give attention to the common problems and characteristics of some of the men who preceded or followed my father in the 5-and-10-cent store world.

In fact there are some very unusual things about the founders of variety stores. The Commonwealth of Pennsylvania seems not only to be the birthplace of many of the variety store founders, but also is the starting point of the stores—Lancaster, Scranton, McKeesport, Wilkes-Barre, Johnstown, and Stroudsburg being important first locations. Among the men native to Pennsylvania who were variety store founders in addition to my father, were—John J. Newberry, James Mack and Walter Shaw who purchased control of the G. C. Murphy chain of 10 stores in 1911, John McCrory, and the Kress brothers.



They all started out modestly with single stores, as owners or half owners, generally with funds they had saved from their personal earnings. None were content to remain single-store merchants. They financed their expansion for many years from profits from their stores. True, most of them found financial partners and backers. They had proved their stores could be successful long before they formed stock companies in which the public could invest.



Godfrey R. Lebhar, Editor-in-Chief of the *Chain Store Age*, commented on early financing of variety chain stores in his history of the chain store movement, published in 1950. He points out the interesting fact that the pioneers not only financed their own early expansion, but that it was inevitable that they should have to do so. Their idea was new and it had to be demonstrated over a period of years that it was an economically sound idea. In fact, Woolworth's had acquired and opened 631 stores before turning to public financing in 1912. The J. C. Penney chain financed itself until it had 197 stores, doing a volume of \$21,000,000. The McCrory Stores Corporation had 113 stores before offering shares to the public. In our own company we had 85 stores and sales of \$10,325,000 before any stock was offered on the market.



Generally speaking, pioneers in the variety chain store field got their start in the last 40 years of the 19th Century. From 1900 to 1930, the chain store idea developed a tremendous impetus and

literally hundreds of chains came into existence. In fact, the movement became so widespread that over-expansion was a definite threat, and many of the chains began reducing or consolidating their stores.



When my father started in business, he had a background of experience in depression years—the 1890's—for which he was grateful. Commenting about it recently, he said: "When one starts at the bottom and learns to scrape, then everything becomes easy. In periods of great depression a man has a chance to learn what bedrock business is. And when he has learned that, he is not in so much danger later of being caught in the fluff that surrounds easy money."



That sums up my father's business philosophy quite accurately. He had, and still has, a tremendous appreciation of the importance of little things—for nickels and dimes, if you please. And yet his vision was never dimmed or obscured when it came to big things—to big decisions. I have a personal feeling that it was his carefulness about little things that made him so sure of his ground when undertaking major projects.



He had, and still has great powers of concentration, a capacity for absorbing infinite details, the ability to collect facts, to evaluate them, and to make decisions. His ability to pick sites or locations for stores—and to estimate whether they should be for 10, 20, 50 or 99-year leases—was almost uncanny. To the best of my knowledge he made very few wrong guesses on the active life of a store site. His powers of concentration may also account for his ability to relax whenever opportunity presented itself. Once decisions were made they were out of mind. Even in the early days, when the success of a new venture was vitally important, he refused to worry about it. If there was a fire, nothing was accomplished by worrying. Over the decades that he practically lived in a suitcase, going from store to store and market to market, he seemed always to have the calm, refreshed energy that goes with a clear head.

His ability to relax and free himself from worry, I would say, resulted also from his ability to pick the right men for management jobs and then to delegate to them full responsibility for the operations.



I would like to insert at this point and in this connection, that my mother, Mrs. Anna E. Kresge (deceased 10 years ago) should be given special credit for her assistance in the selection of the top executives whom my father put on his team. Her ability to identify men of competence, integrity, and loyalty was amply proved in the record of the men to whom my father, with her approval, delegated much responsibility in the early development of our company.



However, my father also gave everything of himself to the business. But that was the spirit of the times in which he and many of his fellow business builders operated. The great goal was to make great progress. Social service and humanitarianisms could and did wait for a better and brighter day.



To give you an idea of how the S. S. Kresge Company grew from its early beginning, I shall give you just a brief summary. The first store was opened in 1897, on the west side of Woodward between State and Grand River, in Detroit. The slogan above the door was "*Nothing over 10 cents*"—and it remained for over 30 years. The second store was opened in Port Huron. The third store, in Pontiac, was opened in 1900. A store was opened in Toledo in 1902, and one in Pittsburgh in 1904. After that they started coming faster, when the company acquired several stores through the purchase of Holmes, Tolle & Evans and a store owned by H. G. Woolworth, a brother of F. W. Woolworth. By 1912, the chain had grown to 85 stores and the firm was incorporated in Delaware for \$7,000,000. By 1916, there were 150 stores and we were re-incorporated in Michigan for \$12,000,000 with a further public distribution of stock.

At the outbreak of the First World War in 1914, the Company had 118 stores, with a sales volume of just over \$16,000,000. In 1920, the 25¢ to \$1.00 stores were started and known as the "*Green Front Stores*" to distinguish them from the 5-and-10-cent "*Red Front Stores*." This greatly enlarged the scope of articles for sale in Kresge stores.



By 1920, there were 184 stores; by 1925, there were 306; by 1930, there were 678; and by 1950, there were 694 stores with a sales volume of nearly \$295,000,000. During these busy growing years, however, many new factors were entering the business picture. We had decided in the late '30's to consolidate our Dollar Stores with our 5-and-10-cent stores and to expand our merchandise assortment. Later, inflation, higher operating and supervisory costs, and higher taxes made it mandatory to combine and enlarge our store facilities. We closed many locations and opened new, larger locations. The counter space in the early stores averaged about 500 to 600 lineal counter feet. Today, the range is from 2,000 to 3,000 feet. The average store sales in 1930 were nearly \$222,000. In 1950, they were \$424,000. At the end of 1956, we had 676 stores or 26 less than in 1950, yet the average sales for 1956 were up to \$542,000 per unit. These figures indicate both the broadening of the merchandise base and the trend to larger stores in which we now concentrate on items under \$10, as well as a moderate amount of inflation. Not all stores are the same size, of course. In fact I would say that the changes in our stores today both as to size and assortments, parallel very closely what happened in the food chain field in which the big supermarkets replaced the early economy stores.



A very important development in recent years has been the evolution of large shopping centers. Twenty-eight of the thirty new stores we opened in 1956 were in shopping centers. Two of our biggest and most outstanding are in Detroit's Northland and Eastland Centers of the J. L. Hudson Company. Our future plans are linked importantly to shopping center development. Wherever and whenever neighborhood stores show signs of deterioration, we

make plans to close them and reopen in the more heavily trafficked shopping centers. In 1956, we reluctantly closed 26 stores, but only after thoroughgoing surveys which indicated discouraging prospects. I should add here that we now operate 82 stores in Canada, five of which were opened in 1956.



The years preceding the present healthy growth of the company—particularly the 1920's and 1930's—presented problems for all chain store operations. You will recall tremendous agitation against all chain stores, violent criticisms, attacks in the press, Congressional hearings, investigations by the Federal Trade Commission, not to mention anti-chain legislation and restrictive taxes. Volumes of testimony were taken, books written, and an incredible amount of public argument appeared in newspapers and magazines throughout the Nation. It is not my purpose here, either to review or comment upon the long controversy which raged, often with bitterness, for 20 years among us. It is sufficient, I think, to remark that the frenzy which inspired it has largely been forgotten, that the shopping public never deviated in its loyalty to the chain stores, and that the end result of the opposition turned out to be a legal, economic, and moral victory for chain store operation.



In these more enlightened times, in which there is happily a much greater social and community consciousness, I feel the chain stores have kept pace and have kept faith. Our store managers are urged to become active, cooperative citizens, and to take part in the community life where they live. Local contractors are used where we build new stores. Most food buying for our stores is done at the local level; employees and supervisors are selected locally, and from these we frequently develop, through our own executive training program, new prospects for managerial and other advanced positions.



Over the years, all S. S. Kresge operations have been directed from the Company's headquarters here in Detroit. We make substantially all our buying decisions here. All merchandise is

purchased through an organization of 23 chief buying executives in the United States, plus 9 in Canada.



In the United States we maintain four district offices, an import department, and one central distributing warehouse which is located at Fort Wayne, Indiana. Our Canadian corporation has a similar set-up. We have only one factory of our own, the Mount Clemens Pottery Company—which supplies all our stores with dinnerware.



In our merchandising operation, which is headed by Vice-President Howard Liverance, we carry approximately 15,000 items. It has been our policy over the years to work closely with our suppliers so that a great number of them have become specialists in our field. We frequently assist in the development of new items and give every encouragement to new ideas. Many producers look to us as the mainstay of their business. While we like to have exclusive sale on many items, we do not insist upon it since such a policy would have a tendency to limit production and result in higher prices. Broadly, it is our policy to maintain that relationship with manufacturers which is most profitable for them and which effects the lowest cost per item.

Today, there are 2,000,000 people employed in variety chain stores in America. In 1956, the S. S. Kresge Company paid out in wages \$75,774,400 to its 35,000 employees.



You may be interested to learn that there are approximately 105,000 chain stores operating in the United States today, and that this is only about 6 percent of the total number of retail stores in operation, but that in volume it represents close to 25 percent of the total in the mercantile field.



Speaking of employment, we of the S. S. Kresge Company are very proud of our large family of employees which includes almost two thousand with *over* twenty-five years of service. Our

executive group of today were brought up from the ranks, most of them starting at the bottom. Our store managers are given complete charge of their stores. They are furnished with merchandise and capital just as if they were operating their own stores. As they prove themselves, they are given larger stores with corresponding rewards in personal income.



My father was both wise and fortunate in selecting his early top associates, several of whom are still members of our Board of Directors. Several early executives have passed on and many are retired, but among them I would like in particular to mention—the late Howard H. Servis, former Vice-President in charge of Real Estate—Wm. C. Fisher, our first Canadian managing Director—the late P. T. Evans, Vice-President in charge of Store Management who came to us from Holmes, Tolle & Evans previously mentioned—the late F. R. Wertman, and C. E. Holzworth, both Vice-Presidents and, the late R. R. Williams, our third President.

I would like now to pay tribute to our present and former directors and officers for they have been a solid bulwark in our organization, wise counselors, thoroughly imbued with company policies, richly endowed with vision, firm administrators, and gentlemen of high repute.



They are—Charles B. Van Dusen, an outstanding member of the Masonic Order, Y.M.C.A. President, eminent churchman and all-around good citizen of Detroit, who followed my father as President, and Daniel C. Fisher, who is also a former President, Carl B. Tuttle, retired Vice-President and Treasurer, longest time associate of father in the business. These men were running the business in our most active expansion years. Each was “company raised” and each has given his full business life to the advancement of our firm. We have been richer and wiser because of their contribution to the Company.



I would like to pay special tribute to our present officers who are headed by the very able Franklin P. Williams, President and Gen-

eral Manager. He is assisted by Director H. B. Cunningham, recently promoted from the position of Sales Director, and just this morning at our monthly Directors' meeting, was elected Vice-President of the Company.



In addition to Mr. Liverance, whom I have already mentioned in connection with our vast merchandising operations, and who is also a Director, I would like to mention Ralph D. Kresge, who is Vice-President in charge of Store Management, which includes the all-important operation functions of all of our U.S. stores. He is also a Director. Another vitally important part of our operations is in the acquiring of buildings, sites and leases, of which our Vice-President, J. B. Hollister, is in charge. Together with W. G. Walters, Secretary; E. H. Todd, Treasurer; J. E. Hearst, General Comptroller, and Directors—Howard C. Baldwin, R. C. Davies (who is Executive Vice-President and Managing Director of our Canadian corporation), and D. F. Valley, these men with my father and myself administer the affairs of the S. S. Kresge Company. There are, of course, many, many other executives extremely important to the total operation of our business, but at the risk of overlooking some—which is one of the penalties of bigness—I shall simply include them all, for I know from my day to day association with company affairs how much they contribute to the successful operation of our business.



Before I come to the closing portion of our story, I would like to deviate for just a moment to comment briefly upon what I feel to be an important point in our story of the S. S. Kresge Company. The growth and progress of our company, as well as that of many other variety chain stores, were possible because we filled a distinct need.

My father once made this significant remark: "I had the right idea at the right time and in the right place." I might add that he also had saved \$8,000 to implement his idea.



The *idea*, which was new to the times, was to display a large number of useful items on open counters where they could be ex-

amined and appraised. It is well to remember that this was the period in which a great number of inexpensive items found their way to the market and customers were intrigued by what a nickel or a dime could buy. Mr. Lebharr tells a story in his book of how Mr. Woolworth's store in Scranton opened with a stock costing \$400 in 5-cent items exclusively and the first day's sales amounted to \$127.65.



This brings up a phase of the idea which was and is extremely important: the fastest possible turnover of goods for sale. I can assure you that a high turnover rate is one of our most important concerns in the conduct of our business. Still another important factor in the conduct of variety store chains was the new ability to buy mass-produced goods so that our assortments could be standardized in all stores. Two other basic elements in the idea of the pioneers were the cash sale and the no-delivery phase.



To become America's second largest variety chain, our firm had to be aggressive. It was the kind of aggressiveness that built America's commerce to become the envy of the rest of the world. What Thomas Newcomen accomplished to further the first steps towards mass production, our company and others have done to advance the cause of mass distribution.



However, the S. S. Kresge Company also has meant something else, which I shall now dwell upon briefly, and that concerns what has been done with some of the profits that accrued to my father for his share in the business.



The first 25 years, in which Dad devoted all his energies to the growth and development of his business, were very successful. His early background, his upbringing in a Christian, God-fearing home, and his lifelong spiritual interests, moved him to set aside a goodly part of his gains to be used for the betterment of Mankind.

This was the beginning of The Kresge Foundation, which was established in 1924, under the guiding hand of his attorney and Detroit's and Michigan's devoted public servant, Paul W. Voorhies. The initial gift to the Foundation was \$1,300,000. Since that time, gifts from my father to The Kresge Foundation have totaled over \$60,000,000 (largely S. S. Kresge Company stock).



This, indeed, was an area in which I could serve—work my father would want me to do—representing the family to the best of my ability. I became a Trustee and Vice-President of the Foundation in 1930. In 1952, upon the death of Paul Voorhies, who had served as President since the start, I became President of The Kresge Foundation which position I still hold, in addition to my present duties as Vice-Chairman of the Board of the S. S. Kresge Company.



Because many of you have foundations of your own, you may be interested in the operation of our Kresge Foundation. I shall be as brief as possible and simply hit a few high spots.



It is unnecessary, perhaps, to remark that thirty-three years ago, proper tax avoidance alone was not a compelling motive for large scale philanthropy, and in this instance it neither suggested nor inspired the creation of this trust.



The purposes of the Foundation, as set forth in the charter, are that funds *out of income* are to be used “to benefit humanity.”



With a measure of experience, we have found that there is no easy way to raise the level of humanity.



Our policies may be poor things but they are our own. They are the product of experience extending over nearly a third of a century. A statement of them contains no inference that they are

better or worse than others. We know only too well that different methods must be employed in different situations. We have made no attempt to follow the pattern of similar institutions.



We have not specialized in any one field of activity or research. We do not claim that this is the best procedure, but we have found through experience that there is need for this sort of service in the present expanding state of our national life.



We act upon applications in writing only and do not use prepared blank forms. The applicant should give us the relevant facts and make a definite request. We have found this procedure to be simple and effective.



Our Board of Trustees is relatively small and we do not have many investigators or a large clerical personnel. Thus far every Trustee, from the Founder down, is a very active Trustee.



Even within a broad charter, we must have some limitations in our policy. There are certain areas wherein we do not operate. We do not make grants to individuals. We make no grants in the field of propaganda.



We have made few grants to provide educational scholarships. This indicates, of course, no lack of interest in this commendable branch of benevolence but many institutions and Government have entered this field and we have not yet determined as a matter of policy when or how we should undertake it.



Generally, we make no grants to tax-supported institutions. We have made exceptions, however, and have provided necessary facilities of a special character performing service unlikely to attract the legislative dollar.

We believe in churches and the advancement of religion. The end of the Second World War found expanded population and the restrictions of the war period had stopped new construction. Many large communities were without places of worship and the Trustees allotted several hundred thousand dollars to ease this situation. We make no apology for it. For practical reasons we were compelled to stop this type of grant.



We do not establish new institutions, preferring to rely upon the proven abilities of management in existing instrumentalities. One exception has been the creation of the Kresge Eye Institute in Detroit. The Trustees felt that a large industrial center furnished an excellent clinical opportunity to provide a needed and unduplicated service. We are happy with results and are presently committed to its full support for an additional three-year period.



We do not contribute to preparatory schools or junior colleges. This is only indicative of the simple fact that we must have limits somewhere in the field of educational grants because of income limitation.



We operate under a broad charter with wide aims and purposes. We have no desire to close any avenue that in the judgment of the Trustees may lead to a better allocation of funds.



Considering our size, we have made large grants and we have made small grants. In our experience, *conditional* grants have been very successful as incentives in the raising of large campaign funds. After all, individual giving is still the great benevolent asset and this field is, perhaps, relatively undeveloped.



The question of "brick and mortar" expenditures is, and will be, a debatable item. We would prefer to make progress in the field of intangibles, realizing that Man's only real hope for the long future is progress in realms that are spiritual.

The administration of The Kresge Foundation is completely under the jurisdiction of its Trustees who are, in addition to my father and myself, Howard Baldwin, and Amos Gregory. In the 33 years since the Foundation was started, we have made grants totaling \$43,514,000.



We are under no illusions about the power of money, but it is silly to dismiss it as worthless. It is not. It means many good things. It represents dormitories, classrooms, hospitals. It represents research facilities and the priceless efforts of men of creative skill and genius. But money alone cannot build character or transform evil into good; it cannot restore the influence and vitality of the home. Spent alone, it might as well stay in the vaults. It becomes palsied and impotent. It cries for full partnership with leaders of character and good will who value good tools in the creation and enlargement of life for Man, who is created in the Image of God.



If our Foundation can in a small way do its share toward the attainment of Man's best aspirations, we will have executed the aims of a generous donor and will feel that our own task has been well done.



At this point I wish to acknowledge, with thanks to Howard C. Baldwin, the time, effort, and skill he used in preparing much of the preceding material concerning The Kresge Foundation, which he delivered in an address on a previous occasion.



That, *Mr. Chairman* and friends, is the story of the S. S. Kresge Company—its growth, its achievements, and a thumbnail sketch of The Kresge Foundation, the result of the success attained by the S. S. Kresge Company and the use of my father's private wealth.



On July 31st of this present year, the directors and certain officers of our Company went to Mountainhome, Pennsylvania, to

help my father celebrate his 90th Birthday. He greeted us jovially—and with a characteristic quip reflecting his thrift, he invited us all to stay for the rest of the month!

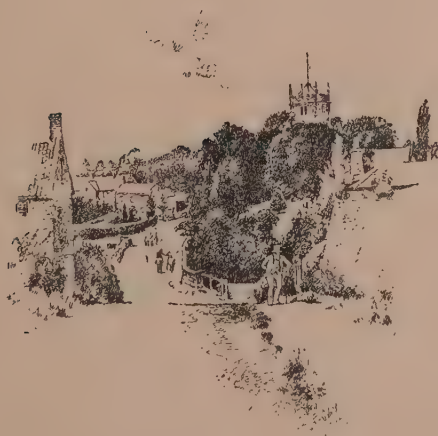


I am sure you will want to know that the Founder is still hale, vigorous, and alert, sharp of mind, and still keenly observant. He no longer actively supervises the empire he built, but he still keeps in close touch with the business, reading reports and commenting on them. He still clings to dimes, still hates waste, and lives modestly. His greatest comfort and enjoyment lie in seeing and knowing that the fruits of his labors not only provide livelihood and purpose to 35,000 families but, that through the Foundation which he created, new vistas will continue to be opened for the betterment of Mankind.

THE END



*"Actorum Memores simul
affectamus Agenda!"*





THIS NEWCOMEN ADDRESS, *dealing with the history of S. S. KRESGE COMPANY and with the life and work of its Founder, SEBASTIAN S. KRESGE, was delivered at the "1957 Michigan Dinner" of The Newcomen Society in North America, held at Detroit, Michigan, U.S.A., on October 8, 1957. MR. STANLEY S. KRESGE, the speaker, was introduced by FRANKLIN P. WILLIAMS, President, S. S. Kresge Company, Detroit; Member of the Michigan Committee, in American Newcomen. The dinner was presided over by COLONEL WALKER L. CISLER, O.B.E., President of The Detroit Edison Company; Chairman of the Michigan Committee, in this international Society.*





“During the last half of the Nineteenth Century the stage was set for developments of our wonderful Twentieth Century.

“With imagination unfettered, slowly but surely, American ingenuity began to find ways for making new things and ways to distribute them, and simultaneously, the American People acquired a desire to have these new things, which were, despite their frequent crudeness, an improvement over the things which people had used in the pioneer days when the first necessity was to tame the wilderness.”

—STANLEY S. KRESGE





“It is not mere accident that the last half of the Nineteenth Century saw the beginnings of America’s department stores, its first grocery chains, its first 5 and 10 cent stores. The time *was* ripe. Mass public transportation was begun. Commercial freight began moving by a national network of rail facilities.”

—STANLEY S. KRESGE





“Our Founder is still hale, vigorous, and alert, sharp of mind, and still keenly observant. He no longer actively supervises the empire he built, but he still keeps in close touch with the business, reading reports and commenting on them. He still clings to dimes, still hates waste, and lives modestly. His greatest comfort and enjoyment lie in seeing and knowing that the fruits of his labors not only provide livelihood and purpose to 35,000 families but, that through the Foundation which he created, new vistas will continue to be opened for the betterment of Mankind.”

—STANLEY S. KRESGE





A BACKBONE OF BUSINESS *in the United States of America* has been through Retail Merchandising—supplying the everyday wants of the American People. In the pages you have read is given the life-story of a great retail merchandising system in America, as well as the life and work of its Founder—one of the early pioneers in chain stores throughout the Country. It is typically
the record of a truly American
enterprise!



DUQUESNE UNIVERSITY LIBRARY
PITTSBURGH 19, PA.

"Western Reserve"

At Cleveland

*One Hundred and Thirty-Two
Years of a Venture in Faith*

JOHN S. MILLIS





"Were American Newcomen to do naught else, our work is well done if we succeed in sharing with America a strengthened inspiration to continue the struggle towards a nobler Civilization—through wider knowledge and understanding of the hopes, ambitions, and deeds of leaders in the past who have upheld Civilization's material progress. As we look backward, let us look forward."

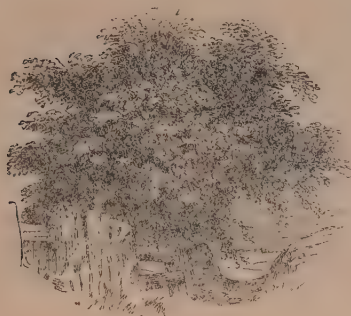
—CHARLES PENROSE
Senior Vice-President for North America
The Newcomen Society of England



This statement, crystallizing a broad purpose of the society, was first read at the Newcomen Meeting at New York World's Fair on August 5, 1939, when American Newcomen were guests of The British Government

"Actorum Memores simul affectamus Agenda"

WESTERN RESERVE UNIVERSITY
AT CLEVELAND
*One Hundred and Thirty-Two Years
of a Venture in Faith*
An Address at Cleveland



AMERICAN NEWCOMEN, *through the years, has honored numerous colleges and universities, both in the United States of America and in Canada. Such a Newcomen manuscript is this, dealing with the beginnings and growth and development of an important seat of learning in the Great Lakes area, which, during more than a century and a quarter, has contributed to the culture and knowledge of the people of the State of Ohio and the Nation at large!*





“By long and honorable tradition the Newcomen addresses are historical in nature. They record the history of distinguished men and the institutions which they have created, built, and served in industry, in commerce, in government, in statecraft, and in education.”

—JOHN S. MILLIS



"Western Reserve"

At Cleveland

One Hundred and Thirty-Two Years of a Venture in Faith

JOHN S. MILLIS

M.S., PH.D., LL.D., SC.D., L.H.D.

MEMBER OF THE NEWCOMEN SOCIETY

PRESIDENT

WESTERN RESERVE UNIVERSITY

CLEVELAND



THE NEWCOMEN SOCIETY IN NORTH AMERICA
NEW YORK SAN FRANCISCO MONTREAL

1957

Copyright, 1957
JOHN S. MILLIS



*Permission to abstract is granted
provided proper credit is allowed*



*The Newcomen Society, as a body,
is not responsible for opinions
expressed in the following pages*



*First Printing: October 1957
Second Printing: October 1957*



*This Newcomen Address, dealing with the
history of Western Reserve University, was
delivered at the "1957 Cleveland Dinner" of
The Newcomen Society in North America,
held at Union Club, in Cleveland, Ohio,
U.S.A., when Dr. Millis was the guest of
honor, on October 17, 1957*



SET UP, PRINTED AND BOUND IN THE UNITED STATES
OF AMERICA FOR THE NEWCOMEN PUBLICATIONS IN
NORTH AMERICA BY PRINCETON UNIVERSITY PRESS





INTRODUCTION OF DR. MILLIS, AT CLEVELAND ON OCTOBER 17, 1957, BY JOHN A. GREENE, CHAIRMAN OF THE BOARD, THE OHIO BELL TELEPHONE COMPANY; CHAIRMAN OF THE BOARD OF TRUSTEES, WESTERN RESERVE UNIVERSITY; MEMBER OF THE CLEVELAND COMMITTEE, IN THE NEWCOMEN SOCIETY IN NORTH AMERICA.

My fellow members of Newcomen:

A LARGE American university, located in a metropolitan city, is a complex organization. John Millis, President of Western Reserve University, fulfills his many duties with genuine distinction in the conduct and leadership of such an institution.



First, he is a distinguished scholar, with his Master's and Doctor's degrees in the basic science of Physics.



In the professional field of scholarship he has been recognized by various honors, including seven Honorary Doctorates. This year, he is serving as President of the Association of Urban Universities.

His first administrative position was as Dean of Lawrence College for five years. Then he assumed the Presidency of the University of Vermont, in 1941. From this position he came to Western Reserve as President, in September of 1949.



In the field of scholarly publications his contributions have covered a wide range of subjects in many leading journals.



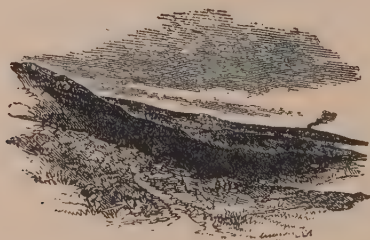
In Cleveland, his interests go beyond his own University. He has Board membership in some dozen Cleveland civic institutions. In addition to these Cleveland activities he is on five National Boards, such as the National League for Nursing, and the Board of Electors of the Hall of Fame.



While the preceding list of honors and activities is impressive, yet his many Cleveland friends honor him particularly for his broad human understanding, his hard work, and the measure of guidance and inspiration which he gives not only to his own institution but to many other Cleveland civic enterprises.



Cleveland is definitely a better place because, among its leaders in so many fields, is a truly distinguished American gentleman:
JOHN SCHOFF MILLIS.





My fellow members of Newcomen:

By long and honorable tradition the Newcomen addresses are historical in nature. They record the history of distinguished men and the institutions which they have created, built, and served in industry, in commerce, in government, in statecraft, and in education. Sometimes history seems to be a record of unrelated events—the story of men and their institutions directed by blind chance and buffeted by forces and circumstances beyond human control. Actually this is not the case with much or all of history if we can but find the central and all-absorbing forces which have motivated and directed Mankind throughout the ages. When these great forces are clearly apprehended, then the record of men and events becomes a clear and logical story. The greatest of these forces is that finest attribute of rational Man—his faith. It is for this reason that I have chosen for the title of this address: “*132 Years of a Venture in Faith.*”



Truly, the history of Western Reserve University is the record of the doings of thousands of men and women who have held a great and never-dying faith about the nature of Man, his relation to his Creator and to his fellowman, and the responsibilities which are his. For centuries men have believed that each individual born into this world was endowed by his Creator with potentialities of mind, of conscience, and of free will; a mind capable of under-

standing the world about him, of comprehending knowledge, of understanding God and Man, that Man might be rational; a conscience capable of distinguishing good from evil, truth from falsehood, beauty from ugliness, that Man might be moral; a free will, that Man might act responsibly, be self-determining, and therefore be free. The consequence of this faith is that Man, because he has special attributes which make it possible to be free, must assume responsibilities of great magnitude for the solution of his own problems, for the meeting of his own needs. The ultimate of this faith is the assumption of responsibilities not only for oneself but equally for other men and for the society of which each is a member. It was this belief, this faith in the hearts and minds of men and women which brought about the foundation of Western Reserve University, its development throughout one hundred and thirty-two years, and guides it today into the future. It is this belief, this faith, which is the uninterrupted and obvious thread of the history which I wish to relate to you.



Western Reserve University is nearly unique in one way—that is in its name. It was named not for a man as were Harvard, Yale, Washington, Johns Hopkins, Case, or Stanford; not for a city as were Chicago, Rochester, Cincinnati, Princeton, or Wooster; not for a State as were California, Ohio State, Michigan, or Ohio Wesleyan; but for a geographical area—the Western Reserve of Connecticut. It is for this reason that I must start with the history of the Western Reserve of Connecticut. When in 1662, Charles the Second issued the Royal Charter for the Colony of Connecticut, the boundaries were stated as the parallels of forty-one degrees and forty-two degrees, two minutes north latitude, and from the western shore of Narragansett Bay to the Pacific Ocean. Conflicting claims arose from other royal grants causing substantial controversy which was finally settled by Congress in 1786. Connecticut was awarded the strip of land along the shore of Lake Erie running 120 miles west from Pennsylvania. This was thenceforth designated as the “Western Reserve” of Connecticut. By this unusual set of circumstances a large area of western lands came under the control of the people of one of the New England

States and made possible the settlement of this area and its development under their traditions and their culture.



The people of Connecticut were a homogeneous group with a definite philosophy of life. They were deeply religious, being Calvinist in tradition and Congregational in organization. They had developed perhaps the most democratic culture in early America, using the town meeting as the basis of government and insisting on conformance to a demanding code of self-discipline, hard work, and piety. They were devoted to the cause of education, believing that self-government could be assured only through the development—intellectual, moral, and spiritual—of every man and woman.



Following the decision of the U.S. Congress creating the Western Reserve, the State of Connecticut proceeded to steps necessary for the laying out of the new lands and their sale to settlers. In 1795, the Connecticut Land Company was organized which purchased three million acres at a price of \$1,200,000. Surveying began in 1795 by a party under the leadership of Moses Cleaveland. The camp established at the mouth of the Cuyahoga River was named for him and thus was chosen the name for the greatest city of the Reserve. Immigrants began to arrive even before the survey was wholly completed and a census of 1,304 reported in 1800 rose to 57,000 in 1820.



Though many of the early settlers came directly from Connecticut, there were also substantial numbers from other parts of New England, and from New York and Pennsylvania. The immigrants from the latter two States were members of the Presbyterian Church who, though holding much the same theological beliefs and religious disciplines as the Congregationalists of New England, used a different form of church organization and government. This led to some ecclesiastical friction. However, rivalry and competition seemed a needless luxury in a pioneer community,

so a plan of union was worked out in 1801 which created a united church for the Western Reserve and elsewhere.



The first concern of the new settlers was to organize their government and to provide for law and order. They then turned immediately to the foundation of those two institutions, the church and the school, which they held most essential for their common welfare and the improvement of society. Naturally, the handful of resident ministers and the missionaries sent to the new country by the churches of the East were leaders in these activities, but churches and schools were very much the concern of all the citizens. In fact, the first public school was begun in 1801 by David Hudson who had led a group of settlers from Connecticut in 1800 to found the first town east of the Cuyahoga River, the town which still bears his name. By no means content with common schools only, a charter for a college in the Western Reserve was sought from the Territorial Legislature in 1801. This request was refused, but among the early bills presented to the first meeting of the Ohio Legislature, after admission of the State to the Union in 1803, was the request for a charter of the Erie Literary Society, which was granted to thirteen incorporators, of whom the first named was David Hudson.



Though the organization was called a literary society, nevertheless the charter granted powers to conduct a school or a college and to grant degrees. An academy was begun in 1804 at Burton, where a tract of 1,130 acres was given by William Law of Cheshire, Connecticut. Instruction began in 1806, making the direct forebear of Western Reserve College the first institution of higher education in the Northwest Territory.



In the decade of 1810 to 1820, the population of the Reserve grew very rapidly. The first arrivals had been farmers for the most part, but this newer influx included many craftsmen and some professional men. The character of the Reserve changed

rapidly from a frontier, simple, agricultural community to one of a higher standard of living, with the beginning of manufacture, trade, and commerce. Many of those recently arrived missed the availability of colleges to which they had become accustomed in New England and to which they might send their sons for higher education preparatory to careers in the church, in law, in teaching, in government, and in commerce. Added to this was an acute shortage of ministers for the pulpits of the churches of the area. By 1820, there was a strong feeling that the Western Reserve must have a college. In 1819, education societies were formed in the two presbyteries to raise money for higher education. The proceeds of these efforts both at home and in the older communities made it possible to support some young men who were sent back east to college and also to accumulate a small fund to found a college at home. By 1822, the citizens of the Reserve were determined to found a college of their own. Consideration was given to doing so under the Charter of the Erie Literary Society. However, there was strong objection to founding the college at Burton, then the site of the academy. The objections were based upon the absence of support of the academy by the citizens of Burton, the lack of communication by major roads or waterways, and the prevalence of malaria thought to arise from the lowland location of the village. An attempt was made to persuade the Society to remove from Burton to a more advantageous location such as Hudson, Tallmadge, or Cleveland. This the trustees refused to do, so the advocates of a college looked elsewhere for a site and proceeded with the foundation of a college independent of the earlier institution.



In 1824, a decision was made to locate the proposed college in Hudson. The Education Societies had accumulated \$3,000 by this time and the citizens of Hudson had subscribed \$7,000. Of this latter sum David Hudson had provided \$2,000. In 1825, twelve men met at Hudson and organized themselves as the trustees of "The Collegiate Institution in the Connecticut Western Reserve." Mr. Caleb Pitkin was elected chairman and a committee was appointed to secure a charter from the Legislature. The charter was granted after some delay and obstruction on February 7, 1826.

The charter provided not only for instruction in the usual collegiate subjects, but also for professional education in such fields as theology, law, medicine, and pedagogy, and for the authority to grant degrees of all kinds. The trustees moved immediately to build the college and, on April 30, 1826, the cornerstone of Western Reserve College was laid on the hill in Hudson.



Not only did the trustees move rapidly to provide a building, but they admitted three students for the Autumn term. Because the building was not ready for use, instruction was given at the academy at Tallmadge by Mr. David Coe, who was named a Tutor and the first member of the faculty. Though subscriptions of \$10,000 had been made for the founding of the college, not all of the gifts could be made in money. Many met their promises with timber and stone for the building, others gave their labor to erect the building, serving as carpenters and masons. By the Spring of 1827, the building was completed and the trustees appointed Mr. Ephraim Sturtevant, a graduate of Yale in 1826, as the faculty to teach the first class at Hudson in 1827. He had twenty-two students under his charge: three sophomores, two freshmen, and eight regular and nine "special" preparatory students.



The trustees continued to develop a college patterned closely after those of New England. In 1828, the first professor was appointed, The Reverend Charles Backus Storrs. The election of a President proved difficult and Mr. Pitkin, the President of the Trustees, served in that office for the early years. However, in 1830, Mr. Storrs reluctantly accepted the presidency and directed the faculty which by then included three other professors and two tutors. The College was then considered to be firmly established and to have made remarkable progress in its first four years.



Time in no way permits a detailed description of the next fifty years in the history of Western Reserve College. However, a few excerpts from the era of the presidency of President George Pierce

may prove of interest. The first President, Mr. Storrs, died only three years after taking office, whereupon the Trustees decided to attract a President from outside of the College, and, in 1834, George Edmund Pierce, a graduate of Yale and of the Andover Theological Seminary, was elected. Mr. Pierce was a man of great vigor and of deep convictions. Also, he was a man of huge stature, being over six feet, four inches in height, and weighing more than three hundred pounds. His duties included a never-ending search for support of the College which required that he travel about the Western Reserve, talking, preaching, and begging for funds and students. The usual way of travel was by horseback, but no horse strong enough to carry him could be found, so President Pierce ordered a buggy shipped from Hartford. When the buggy arrived and Mr. Pierce began to drive about, it was noted that it had springs. In the minds of the pious, such a conveyance seemed much too luxurious for a clergyman and college president. Protests were made to the Trustees who were urged to discharge Mr. Pierce for such worldly and ungodly conduct. It is reported that Mr. Pierce solved the problem by removing the springs, and thereafter jolted over the rough roads with the body of the carriage resting directly upon the axles.



President Pierce based his educational program on that of his alma mater, Yale College. He took early steps to develop a strong faculty and to arrange the curriculum on the same standards that were in force at Yale and at the best New England colleges. Professorships in physics and astronomy were created and the curriculum expanded beyond that of the early days which was restricted to the ancient languages, literature, rhetoric, religion, mathematics, and philosophy. High standards of admission, promotion, and graduation were insisted upon, with the result that Western Reserve College acquired the reputation as being equal in quality to those of New England and as the best institution west of the Alleghenies. Because President Pierce drew on the Yale faculty and from Yale graduates with such frequency, Western Reserve acquired the nickname of the "*Yale of the West*." President Pierce was a tireless and successful money raiser. During his

administration a number of buildings were erected, the college endowment enlarged, and scientific equipment acquired which included one of the earliest astronomical observatories.



The students at Western Reserve College in the 1830's and 1840's not only met a rigorous intellectual program, but also lived under a discipline which the present-day student would feel harsh and unreasonable. The college day began at 5:00 a.m. with Chapel service at 5:15, the first recitation at 5:30, and breakfast at 6:30. Study hours were rigidly prescribed. The New England Sabbath was in effect so that at sundown on Saturday the students were restricted to religious exercises, attendance at preaching services, and contemplation until Sunday evening. Sunday evening was recognized as a time for relaxation, so that the students were free to seek entertainment and to walk out in the village.



It was thus that Western Reserve College began and continued for fifty-four years as a college devoted to the liberal arts, located in a small village, greatly influenced by the traditions and standards of Connecticut from which the founders had come. There were periods of great success and progress. There were periods of trouble and uncertainty. Financial panics swept the Country and the College found it difficult to collect promised financial support. Controversy over Abolition created divisions among trustees, faculty, and students. The Civil War drew many of the faculty and the majority of the students into the army. But with all the problems, in face of frequent discouragement, the College, motivated by an abiding faith, persevered throughout the years in its determination to provide an education of high quality to the young men of the Western Reserve.



As the Year 1880 approached, the Trustees of the College were discussing the wisdom of moving the College from Hudson to Cleveland. In the half century since its founding, Cleveland had grown rapidly in size, in wealth, and in national reputation.

Growth in Hudson had been slow, and it no longer was at the center of population of the Western Reserve. The original impetus for the founding of the College and its early support had come from the union of the Congregational and Presbyterian churches. This union had been dissolved in the 1830's, and each denomination had founded a college under its own control—Oberlin College in 1833 and the College of Wooster in 1866. The founding of these rival institutions was a serious blow to a country college of liberal arts. Further, the Medical Department of the College which had been founded in Cleveland in 1843, had been most successful. The Trustees let it be known that if a gift of \$500,000 should be provided, the College would be moved to Cleveland and would become a university. Such a gift was proposed by Mr. Amasa Stone who offered to provide \$150,000 for buildings and \$350,000 for additional endowment if the College were relocated in Cleveland and, further, if his son, Adelbert Stone, who had died in his sophomore year at Yale, would be memorialized. Mr. Stone's offer was accepted and the decision to move was formally taken on September 20, 1880. This decision did not receive universal approval. Two Trustees were opposed, while the students were enthusiastic at the prospect of leaving the quiet village for the excitement of the large city. The alumni were extremely critical and, as can be easily understood, the citizens of Hudson were loud in their criticism. However, the die was cast—the country college, after fifty-four years of life, was to become an urban university.



The Trustees of the College joined with the Trustees of the Case School of Applied Science, newly founded on the gift of Leonard Case, to select and acquire a site for the location of the two institutions. A public subscription raised over one hundred thousand dollars and the property east of Doan Brook and south of Euclid Avenue in Cleveland was purchased for the two institutions. Arbitrations divided the plot, giving the western portion to Case and the eastern to Reserve. It is of interest to recall this joint activity in the early days of Case and Reserve in Cleveland in

light of some of the joint planning in which these two institutions are participating seventy-five years later.



Mr. Stone personally supervised the construction of two buildings, one a dormitory now called Pierce Hall, and used for classrooms, the other a classroom building, known as the Adelbert Main Building. These buildings, begun in 1881, were dedicated in the Autumn of 1882 and classes were begun in Cleveland with that Autumn term. To comply with Mr. Stone's wishes as to the use of his son's name, the Trustees asked that the name of the institution be changed to Western Reserve University, and named the collegiate department Adelbert College. Thus, by the opening of the 1882-83 academic year, the move and change in structure were accomplished and the University established with two colleges, the undergraduate program of arts and sciences and the medical school. The preparatory department, which had been an important part of the College throughout the Hudson days, remained in Hudson and the campus and buildings were transferred to it. This department continued to be operated by the University Trustees and was supported by appropriations from the Adelbert College budget. There is no opportunity here to detail the subsequent history of the preparatory department, but many know it well in its present form, Western Reserve Academy, as an independent school of the highest quality operated on the old campus at Hudson and in some of the very early buildings which are a continuing reminder of the founders and that which they built.



The history of no institution is free of vigorous debate and contention over questions of great importance within a given era. Such a debate over the question of coeducation began at Reserve after the removal to Cleveland. It may be a bit difficult, in 1957, to realize the great importance which was attached to this question seventy-five years ago, but I am sure that the propriety and wisdom of educating young ladies in the company of young gentlemen was a matter of deep concern and engendered deep and some-

times violent differences of opinion. Coeducation was by no means unknown in Western Reserve College. Women had been admitted to the preparatory department for years and to the College since 1872. This occurred at the beginning of the presidency of Mr. Cutler and it is likely that the admission of women was more by decision of the President than by Trustee or faculty action. With the removal to Cleveland, more women enrolled so that, in November 1884, Adelbert College numbered sixty-nine men and twenty women. From this time on, the debate on coeducation shook the institution to its roots. The male students were opposed to women in the classroom, most of the faculty were opposed to coeducation, and some opposed any higher education for women, but always for the most humane reasons. The Trustees were divided upon the question, while President Cutler was most vigorous in his championship of coeducation. Mr. Cutler resigned in 1886, but no successor was chosen until Mr. Haydn consented to serve as President in late 1887. At that time the decision was made against coeducation and simultaneously approval was given to the foundation of a coordinate college for women.



That college for women was formally organized in 1888 and its first students were admitted in the Autumn of that year. The faculty of Adelbert College did double duty and served also as the faculty of the new college which was first called "The Cleveland College for Women." Support for this new division of the University came with encouraging speed, so that within two years it had a building of its own and the beginnings of an endowment. The name was shortened to "The College for Women," and a sound faculty was recruited to instruct a rapidly growing student body. One of the women who was most deeply interested in the College was the daughter of Amasa Stone, Flora Stone Mather (Mrs. Samuel). Her many contributions to the College and her leadership in securing the support of others insured its success and its well-being. Twenty-one years after the death of Mrs. Mather in 1931, the College for Women became Flora Stone Mather College.

The evolution of a college into a university is marked in the first place by the development of graduate and professional departments and the consequent enlargement of its educational offerings. This phase of the development of Western Reserve began during the presidency of Charles Franklin Thwing, who was elected in 1890. Shortly after taking office, Mr. Thwing recommended that graduate study be offered in the arts and sciences. A Graduate Department was organized in 1892 to give master's and doctor's degrees. This division became the Graduate School in 1928, and today enrolls a larger number of students than any school or college of the University except Cleveland College.



The first venture in professional education was begun early in the Hudson days with the formation of the Theological Department, which served well for a generation, supplying many of the Ministers for the Congregational and Presbyterian Churches of the Reserve. However, as sectarian support was withdrawn this department of the College was discontinued.



The oldest professional school of the University is the School of Medicine, begun in Cleveland in 1843. The College granted the degrees but assumed no financial responsibility for this division. Financially, the Medical School operated as a cooperative enterprise of the faculty. The students paid tuition to one of the professors who had been appointed treasurer. After paying for the heat and light of the building, for apparatus and for materials, the remaining funds (if any), were divided among the professors. The curriculum of one hundred fourteen years ago seems incredible in view of that prescribed today. The admission requirements consisted of achieving the age of eighteen and devoting a year in apprenticeship to a practicing physician. The school year consisted of sixteen or eighteen weeks of lectures given by a faculty of seven professors. A candidate for a medical degree was required to attend two years of these lectures and to spend the balance of his two years under the tutorship of a physician. In these early days

there was little science included in the curriculum and no laboratory work as we now know it. Dissection of human cadavers was carried out largely in secret, because there was no legal way to obtain bodies. However, from the beginning, the Reserve Medical School required attendance at two weekly clinics which was considered a high requirement and a substantial advance in medical education.



In the next fifty years, the school grew in success, absorbing two Cleveland rivals—the medical departments of Ohio Wesleyan and of Wooster. From its beginning, it was associated with a hospital, first known as the City Hospital, later known as Lakeside, located at what is now East Ninth and Lakeside Avenue. When, in 1910, Abraham Flexner wrote his famous report on medical education for the Carnegie Foundation for Teaching, he reported that the Western Reserve Medical School stood third in the Nation as to its excellence and stability.



Following the First World War it was decided to move the Medical School and its affiliated hospitals from their downtown locations to the University Circle campus. Mr. Samuel Mather took the leadership in this plan in which he was joined by many prominent Clevelanders. Substantial sums of money were contributed to erect the Medical School, the Institute of Pathology, and the several buildings of the University Hospitals, and thus a great medical center was born. Through the years, it has grown as a center of medical teaching, investigation, and patient care, till it now enjoys a national and international reputation as one of the great centers of the Country.



The first discussion in Cleveland of the need for a school of law began in the 1850's. No action was taken however until Mr. Thwing began the expansion of the University. In 1891, Mrs. Backus agreed to give an initial endowment for the organization of a law school at the University as a memorial to her husband,

Franklin Thomas Backus, a distinguished member of the Cleveland Bar. The school was promptly organized and students first enrolled in the Autumn of 1892. The School was first housed in the old Ford residence at the site of the present Medical Library, later in the original dormitory, and, in 1896, in its own building on Adelbert Road.



The early years of Mr. Thwing's presidency were marked by the beginnings of still another professional school. In the Nineteenth Century, dentistry was taught as a department of the medical schools. This was the case at Western Reserve for, in 1892, the Medical Faculty recommended the addition of a Dental Department, and such a department was organized and housed in the Medical Building. The demands of the other departments soon forced the Dental Department to seek other quarters which were rented. From the beginning, the University Trustees had taken no financial responsibility for dental instruction. Having no endowment, and having lost the support of the Medical School, dentistry had a most difficult time. In the period from 1900 to 1917, it was operated as a proprietary school, with the University merely awarding the degrees. This arrangement of affiliation was not particularly successful, so that early in 1917 the University took full responsibility and control for the School of Dentistry, and it was moved to a new building on Adelbert Road, which it presently occupies.



Two more professional schools were organized prior to 1920. The first was the School of Library Science, begun in response to a request from some of the citizens of Cleveland, notably Mr. William Brett, Librarian of the Cleveland Public Library. An endowment of \$100,000 was given by Andrew Carnegie through whose extensive gifts public libraries were being formed in hundreds of American communities. The School began in 1905 and has achieved a position of leadership in the profession.



The fifth professional school founded during Mr. Thwing's presidency was in the field of social work. The school was begun

in response to urgent requests by the welfare agencies of Cleveland which were in dire need of professionally trained workers to conduct and direct their work. The School of Applied Social Sciences was opened in 1916 with Dr. James Elbert Cutler as its first Dean, and has become one of the larger schools of its kind, drawing its students from all parts of the Country and from Abroad.



The decade from 1920 to 1930 saw the founding of three more schools of the University. The School of Architecture, which had been begun by the Cleveland Chapter of the American Institute of Architects, was taken over by the University and operated in that fashion until 1953, when it was absorbed into the Faculty of Arts and Sciences. The students are now registered, as are other undergraduates, in Adelbert and Mather Colleges.



The teaching of nursing had been carried on by the Lakeside Hospital for many years. In 1923, Frances Payne Bolton made a magnificent gift of nearly \$2,000,000 to found the University school which bears her name. This was one of the earliest university schools of nursing and the second to require a bachelor's degree for admission. In its thirty years, the Frances Payne Bolton School of Nursing has grown to be one of the world's best known collegiate schools, attracting students from all over the world, and providing highly trained nurses for the teaching profession and for leading positions in nursing service.



In the mid-'twenties, a citizens' committee on higher education made a number of recommendations to the Cleveland institutions. Among them was the suggestion that a college be opened for adults who might acquire a higher education on a part-time basis. The original proposal was that Reserve and Case should join with the Y.M.C.A. Evening School to offer courses in a downtown location. A charter for such an institution was granted, but the "Y.M.C.A." withdrew from participation so that Cleveland Col-

lege began in 1925 under the supervision of Case and Reserve. Mr. Newton Diehl Baker was Chairman of the Trustees and was largely instrumental in the founding and upbuilding of the College. A. Caswell Ellis was chosen as the first Dean and gave this new venture vigorous and successful leadership. Case withdrew from the arrangement after a few years and the College was carried on as a part of Western Reserve University, operating for twenty-five years on the Public Square. The corporation of Cleveland College was amalgamated with the University corporation in 1941, and the offerings removed to the campus in 1954. Now, Cleveland College offers a full range of university courses to adults in the afternoon and evening hours, using the full facilities of laboratories, libraries, and faculties of the whole University.

In 1928, a School of Education was organized to give degrees at both the undergraduate and graduate levels. This school was begun with the encouragement of the Cleveland Board of Education and in large measure to provide teachers for the Cleveland area. In more recent years, this school has been replaced with a Division of Education which presents a large number of curricula preparing teachers in many fields and at both the undergraduate and graduate levels.



One more professional school has been organized to complete the modern University, that is, the School of Business. The first instruction in this field was given in Adelbert College aided by the gift of Mr. Henry Payne McIntosh who endowed a professorship in Money and Banking. Now the instruction in this field is given by a Faculty of Business, consisting of eight departments which furnish both undergraduate and graduate instruction.



The second aspect of the evolution of a college into a university is the development of research activities. In a modern university, the discovery of knowledge, its organization and application, has become as large a part of the institution's responsibility as the communication of knowledge through teaching. Scholarly research began at Western Reserve in the very early days as might be

expected from the caliber of men who formed its faculty. Elias Loomis directed the building of the first astronomical observatory west of the Alleghenies and conducted therein important astronomical studies which brought attention from scholars around the world. He was succeeded by Charles Young who had one of the most successful scientific careers of the Nineteenth Century. Probably the most able scientific scholar in the first century of the College was Edward Williams Morley, who joined the faculty in 1868 and remained until his retirement in 1906. His investigation on the atomic weight of oxygen and hydrogen is still a classical piece of work and his collaboration with Professor Albert A. Michelson of Case on the "ether draft" experiment formed the experimental basis for the Theory of Relativity and, in a real sense, the beginning of the modern age of physics.



Experimentation in the biological and medical sciences began early also. In 1907, the first Department of Experimental Medicine in the Country was begun in the Medical School. Today, research in medicine alone involves an annual expenditure of two and a half million dollars and within the University as a whole the budget allocation for research is nearly as great as that for instruction.



Not only does the University engage in large amounts of research in its several departments, but of recent years it has pioneered in investigation of important fields which lie between two or more of the organized disciplines. In 1953, the Law-Medicine Center was organized to provide a means for a scholarly attack upon some of the problems which are of common interest to those two professions. In 1955, the Center for Documentation and Communication Research was organized in the School of Library Science to make a pioneering attack upon the problems of information storage and retrieval and to bring some of the remarkable electronic devices to the aid of all of us who are overwhelmed by the problems of handling the flood of information upon which not only scholarship but also industry and government depend for every decision and action.

As this Newcomen address nears a conclusion:

I have attempted in less than half an hour to give my listeners a sketchy story of the development of a university. I have tried to convey to you some of the joys, some of the sorrows, some of the success and some of the failure, as a frontier college has grown to a great urban university. Probably I have succeeded only in both confusing and boring you. But I would ask that you bear in mind the contrast of the beginning and the present separated by one hundred thirty-one years. The college that opened its doors to three students, in 1826, now enrolls more than ten thousand a year. The college that began with a faculty of one tutor now lists well over a thousand teachers. The college that offered a single classical curriculum for the bachelor's degree now offers bachelor's, master's and doctor's degrees in more than two score fields of human knowledge. The college that began with \$10,000 promised by its supporters, now can report a net worth of \$56,-184,084 on June 30th last. The college which operated in its first full year on a budget of less than \$2,000 now expends approximately \$11,000,000 each year to teach and to investigate.



Growth such as this does not occur by the operation of natural law or by chance. Growth such as this occurs because men and women believe deeply and, seeing visions, give themselves, their energies, and their substance that a compelling cause may be served. The real history of Western Reserve University is not a tabulation of dates, or of monies, or of events. Rather it should be a record of the lives of literally thousands of men and women who as trustees, as teachers, as donors, as officers, have had an abiding faith in the power of knowledge to lead to a better world and a better life. I have mentioned David Hudson and Caleb Pitkin as two of the original trustees, but here are a few more names of trustees who have directed the University, men whom you will recognize as those who have made the Western Reserve, Ohio, and America: Jared Potter Kirtland, Truman Handy, James Garfield, John Hay, Rutherford Hayes, Liberty Holden, Samuel Mather, Washington Tyler, Henry Hatch, Worcester Warner, William Mather, David Norton, Louis Severance,

Jeptha Wade, Myron Herrick, Charles Brush, Howard Eels, Malcolm McBride, Andrew Squire, Charles Bingham, Frederick Goff, Francis Prentiss.



I have mentioned Presidents Storrs, Pierce, and Thwing, but I must also pay tribute to President Hitchcock who followed Mr. Pierce and preserved the College through the troubles of the Civil War and through deep and difficult times; to President Cutler who held office through the end of the Hudson Era and carried much of the responsibility of the move to Cleveland; to President Haydn who served by his insistence only for a three year interim and who preserved the University through its first trying years in its new situation; to President Vinson who saw great opportunities for growth and who suffered the frustrations and disappointments of the financial crash of 1929; to President Leutner who served so valiantly through the trying days of the 1930's and met the great demands of the Second World War. I have mentioned David Hudson, Amasa Stone, Flora Stone Mather, Samuel Mather, Andrew Carnegie, and Frances Payne Bolton as donors whose benefactions made possible spectacular advances in the life of the University. I must also mention many others, such as Ohio C. Barber, Leonard Case, M. A. Hanna, John H. Clarke, E. M. Ickes, Florence Harkness, John L. Woods, Oliver Payne, Elizabeth Severance Prentiss, John H. Hord, Gertrude Chandler Tucker, and hundreds of others.



I have mentioned a few of the faculty whose scholarly contributions were of historical importance. To do justice, I should call a roll of *several thousand* names—names of those men and women who have devoted their talents and energies to the pursuit of knowledge and to its communication through the teaching art to the tens and tens of thousands of students who have come to Western Reserve University in one hundred thirty-two years in the search for truth and enlightenment.



The story of Western Reserve University is really the story of the lives and the acts of thousands of people. They were and

are from all walks of life, from this and other parts of the world. But one thing welded them into a unity of purpose and of action. That one thing is the abiding faith in the power of the human mind to know, in the reliability of the human conscience to judge, in the force of the human will to act. That unity arises from the belief that through education can Man be brought to a realization of his powers, that through knowledge, Man may be free. This is the faith that founds a college on the frontier, that nourishes it through trial and tribulation, that sustains it in its maturity.



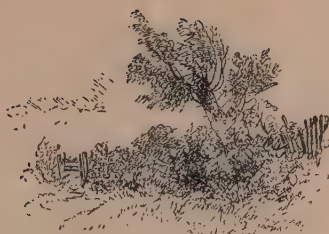
The story of Western Reserve University is also the story of individual initiative and of private enterprise in higher education. It is the story of those men and women who, since the foundation of our Country, valued their freedom so highly that they gladly accepted the concomitant responsibilities. It is a record of the devotion of thousands of people who made sure that educational opportunity was available to their sons and daughters and also to the generations to come, that our young citizens might have the means to become and to remain free. The founders and those who have followed built the University out of their own energies and their own means. This story is, therefore, the record of the independent university, an institution built on a faith that sustains it today and provides the courage to face future tasks even greater than those of the past.

THE END



"Actorum Memores simul affectamus Agenda!"





THIS NEWCOMEN ADDRESS, *dealing with the history of*
WESTERN RESERVE UNIVERSITY, *was delivered at the*
“1957 Cleveland Dinner” *of The Newcomen Society*
in North America, held at Cleveland, Ohio, U.S.A.,
on October 17, 1957. DR. MILLIS, the guest of honor,
was introduced by JOHN A. GREENE, Chairman of the
Board, The Ohio Bell Telephone Company; Chair-
man of the Board of Trustees, Western Reserve Uni-
versity; Member of the Cleveland Committee, in
American Newcomen. The dinner was presided over by
GEORGE W. CODRINGTON, Retired Vice-President and
General Manager, Cleveland Diesel Engine Division,
General Motors Corporation; Chairman of the Cleve-
land Committee, in this international Society.





EDUCATION AND MATERIAL PROGRESS—the two go hand
in hand! From earliest days in America, Education and
Technical Training have contributed to and in a sense
have sustained Industry, Transportation, and General
Business. In turn, these have supported Higher Educa-
tion. In the pages you have read is a dramatic, colorful,
and always human narrative—the life-story of the
time-honored Western Reserve
University at Cleveland!



women

4
JUN 26 19

Assoc

"Up from the Family Store" Pa

Federated Department Stores

FRED LAZARUS, JR.



544



"Were American Newcomen to do naught else, our work is well done if we succeed in sharing with America a strengthened inspiration to continue the struggle towards a nobler Civilization—through wider knowledge and understanding of the hopes, ambitions, and deeds of leaders in the past who have upheld Civilization's material progress. As we look backward, let us look forward."

—CHARLES PENROSE

*Senior Vice-President for North America
The Newcomen Society of England*



This statement, crystallizing a broad purpose of the society, was first read at the Newcomen Meeting at New York World's Fair on August 5, 1939, when American Newcomen were guests of The British Government

"Actorum Memores simul affectamus Agenda"

“UP FROM THE FAMILY STORE”

Federated Department Stores

An Address at Cincinnati



AMERICAN NEWCOMEN, *through the years, has honored numerous important corporate enterprises, within broad fields of pioneer effort and pioneer contributions, both in the United States of America and in Canada. Such a Newcomen manuscript is this, dealing with the history and the philosophy of a great group of retail merchandising units, in many cities and in widest diversity of inventories. Amazing results have*

been achieved!





“For purposes of a little science fiction story, let us assume that in the course of a millennium our civilization has been surpassed and lies buried, like the seven cities of Troy, beneath the foundations of a newer, brighter age. And let us picture to ourselves the feelings of some future archaeologists who, digging in the ruins of one of the great cities we know now, comes upon the Pompeii-like remains of *a department store!*”

—FRED LAZARUS, JR.



“Up from the Family Store”

Federated Department Stores

FRED LAZARUS, JR.

MEMBER OF THE NEWCOMEN SOCIETY

CHAIRMAN OF THE BOARD

FEDERATED DEPARTMENT STORES, INC.

CINCINNATI

OHIO



THE NEWCOMEN SOCIETY IN NORTH AMERICA
NEW YORK SAN FRANCISCO MONTREAL

1957

Copyright, 1957
FRED LAZARUS, JR.



*Permission to abstract is granted
provided proper credit is allowed*



*The Newcomen Society, as a body,
is not responsible for opinions
expressed in the following pages*



*First Printing: November 1957
Second Printing: November 1957*



*This Newcomen Address, dealing with the
history of Federated Department Stores, was
delivered at the "1957 Cincinnati Dinner" of
The Newcomen Society in North America, held
at Queen City Club, in Cincinnati, Ohio,
U.S.A., when Mr. Lazarus was the guest
of honor, on October 24, 1957*



SET UP, PRINTED AND BOUND IN THE UNITED STATES
OF AMERICA FOR THE NEWCOMEN PUBLICATIONS IN
NORTH AMERICA BY PRINCETON UNIVERSITY PRESS





INTRODUCTION OF MR. LAZARUS, AT CINCINNATI ON OCTOBER 24, 1957, BY JOSEPH B. HALL, PRESIDENT, THE KROGER COMPANY; MEMBER OF THE CINCINNATI COMMITTEE, IN THE NEWCOMEN SOCIETY IN NORTH AMERICA.

My fellow members of Newcomen:

OUR speaker tonight presents problems! An introduction should be relatively short—but how can one abbreviate so many activities in so many fields?



First, our speaker is a top-flight merchant with fifty-five years in retailing—all in one organization or enlargements thereof. He started in Columbus in 1902, in the store founded by his Grandfather in 1851—the F. and R. Lazarus and Co. This store was grouped with four others to form Federated Department Stores, in 1929. The sales of this company last year reached a total of \$601,492,000. Sales for the first six months of this year moved the company into first place in the department store field.



Second, our speaker is a business statesman. He has been active in the Associated Merchandising Corporation, serving as Chairman. He was one of the founders of the Ohio State Council of Retail Merchants. The Executive Director of the Ohio Council

who recently retired has told me that his outstanding business experience has been the association over the years with our speaker. He has been active in the American Retail Federation.



Third, our speaker is a civic leader. At Columbus, he served as director of the Gallery of Fine Arts, the Metropolitan Housing Authority, and the Community Fund. He has taken an active part in the civic life of Cincinnati. He has served as President and Chairman of the Citizens Development Committee. And he has made sure that his company has been active in all phases of civic activity.



Fourth, our speaker is a national figure. I can select but a few of his many active connections. He is a member of the Board of Governors of the American Red Cross. He serves on the important Research and Policy Committee of the Committee for Economic Development. He is a member of the Business Advisory Council for the U.S. Department of Commerce, the National Council of Junior Achievement, the Board of Directors of the National Planning Association, and a Past-Director of the United States Chamber of Commerce. He is a member of the Board of Trustees of the Eisenhower Exchange Fellowships.



Our speaker has had recognition in many fields. He received the 1949 Tobé Award as the Nation's outstanding retailer. He received the 1951 Gold Award of the National Council of Christians and Jews. Vice-President Nixon presented to him the Human Rights Award of the Joint Defense Appeal, in 1955. He was granted the degree of Doctor of Laws by Ohio State University, and the degree of Doctor of Commercial Science by the University of Cincinnati.



It has been my privilege to seek the advice of "Mr. Fred" on various matters. I have served with him in a number of civic and

business organizations. I respect him for his business knowledge and merchandising leadership. He has given of himself so capably in every undertaking with which he has been associated. His advice has been sought by Presidents of the United States of America. Few men have made the contribution to retailing that has been made by our speaker.



It is indeed a privilege and a pleasure for me to present to you:
FRED LAZARUS, JR., Chairman of the Board of Federated Department Stores.





My fellow members of Newcomen:

IN the blue and timeless waters off Cap Haitien in the Caribbean a few years ago a diver probing in the ruins of an ancient wreck came upon an anchor. Decomposed by years of immersion, encrusted with sea lime and coral, it could have been a relic of almost any age; anchors are almost a dime a dozen around the rocky shores of Caribbean islands. But this anchor was different—it was identifiable. Long-shanked and peculiar by comparison with later types, it appeared to be of Spanish make, a kind that went out of use shortly after Columbus' time. And this probability, linked with other known facts of that long-gone age, made this anchor one of the most momentous finds ever taken up out of the Sea in western waters.



It is with little doubt one of the oldest maritime relics of our hemisphere; and it is quite probably the anchor of Columbus' own ship, the *Santa Maria*, which went aground on a Cap Haitien reef on Christmas night in 1492. Divers had seen this wreck before. Historical records showed that this was the area where the *Santa Maria* was lost. But it was not until the anchor was found that this wreck could be identified—its place in time, and therewith its character, its purpose in sailing these waters where it went down, in fact, its entire history.

Let us now project ourselves ahead a thousand years to the Year of 2957.



Let us assume, *Mr. Chairman*, for purposes of a little science fiction story, that in the course of a millennium our civilization has been surpassed and lies buried, like the seven cities of Troy, beneath the foundations of a newer, brighter age. And let us picture to ourselves the feelings of some future archaeologist who, digging in the ruins of one of the great cities we know now, comes upon the Pompeii-like remains of a *department store*!



If nothing else were ever found or known of our 20th Century civilization, such a department store would give our happy archaeologist material for a lifetime of well-founded conjecture.



He would find, laid out for him, all of the clothes we wore, from underwear to evening dress, from summer's bathing suits to winter's coats of wool and fur. He would be able to reconstruct in full detail a 20th Century household, from the doormat to the attic fan, with all its kitchen appliances, its furniture, its chinaware and silver, its heating plants and air conditioners, its carpets, closets, sinks, pincushions, sewing machines, lamps, beds, chairs, hardware—everything. He would find the toys our children played with, the games and gadgets that provided our social amusement, the music we listened to, the books we read, the cosmetics, and even the medicines, we used. He would know the prices we paid for all these things, and could deduce, with reasonable accuracy, what was precious to us, what we considered necessary, the things we worked for, the fabric of our day-to-day lives.



The purpose of this little science fiction fantasy is to show you how we regard the work to which we are dedicated—our view of what, in its largest sense, a department store is. It helps to illuminate a favorite thought of mine: that a department store is

a living mirror of our civilization in which we see the constantly changing needs and wishes of our people. The department store is as big and diverse as civilization. Yet it is microscopic in its detail. It is as purposeful as any business run for profit. Yet it is as changeable as a woman's whim. It must be all these things if it is to survive and prosper.



It is Federated's intention to prosper. How well do we measure up against our own intention? How well have we kept pace with the needs and the growth of America? Let us take a quick look at the record:

- * We offer our customers upwards of 275,000 separate items in every major store, and we completed 118,000,000 transactions last year—700 every minute of every business day.
- * We now have 41 stores in nine major metropolitan centers and in nine smaller, fast-growing communities in most geographic areas of the United States of America. Of these, 23 are branch stores, principally in America's rapidly expanding suburban areas and we now have plans to open seven more.
- * We have tripled our volume in the last dozen years, handling more than \$600,000,000 in sales last year.

And we are still growing.



How was all this achieved?

Every business enterprise has certain major aims, and a certain business philosophy. Ours at Federated—aim and philosophy combined—is profitability and growth.

Let us look at these things in turn.



Profitability: Like any company, we are shaped in part by the traditions of our founders, and profitability certainly was one of the characteristics of our founding stores.

Four stores came together in 1929 to form Federated: Filene's of Boston, Abraham & Straus of Brooklyn, and Lazarus of Columbus with its then subsidiary, Shillito's here in Cincinnati.

Shortly thereafter we were joined by Bloomingdale's of New York.



We had known each other and, to a certain extent, worked with each other for a number of years. In actually joining together we had three basic aims in mind:

First, by pooling our resources, we felt we would gain strength to weather any economic storm or to exploit opportunities for growth.

Second, by federating we gained some geographical diversification of our operations. Here were planted the seeds of the future growth which, as we shall see, bore fruit in the years following the Second World War.

Third, by a more intensive exchange of information, each store could avoid the others' mistakes and learn from the others' successes.



For sixteen years after our founding we sought these objectives only through a loose, holding company organization. In 1945, we established here in Cincinnati the first real headquarters staff of Federated, and much of what I say will deal with the ensuing twelve years.



As I have explained, our roots go back to great, successful, family-owned stores—to Filene's, to Abraham & Straus, to Lazarus and Shillito's and to Bloomingdale's. The families who had built these stores had been able to do so only by insisting that the stores be profitable and by plowing back a part of the profits into expansion.



Lincoln Filene and his brother, Edward, followed this principle when they took over their father's store in Boston and began what

was to be one of the most phenomenal stories of growth in American merchandising history. My grandfather, Simon Lazarus, and my father followed the same principle in Columbus, eschewing other inviting forms of investment for the one they believed in and to which they were dedicated: the business of merchandising.



This tradition of our founding stores undoubtedly produced three characteristics of Federated today. First, it unquestionably contributed to the standing we enjoy among department store groups as to profitability. Second, it set the precedent for our policy of reinvesting a substantial part of our profits in our business. And it certainly influenced us in fixing a third policy, the policy of restricting our invested capital, insofar as possible, to the business we know best: merchandising.



Let me enlarge on this third policy by giving you an illustration of what it means.

We decided, for example, that we are not real estate investors although real estate is essential to the conduct of the department store business. Therefore, we own only 25 percent of the space we occupy. We lease 75 percent. We know that we can make the capital that would be required to own all our stores work more profitably if it is invested in merchandise than if it is imprisoned in stone and cement and steel. We have managed, in this policy of leasing our stores rather than owning them, to keep our rent low.



The same line of reasoning has determined our policy toward consumer finance. Federated has been a leader in promoting installment buying, believing that it fits the budgeted living of young American families. But we have kept our own capital reasonably free in this area, too, by selling a part of our installment accounts receivable to banks.

In short, we believe that merchandise is our most profitable investment; that merchandising is the most profitable business for us to be engaged in; that major ventures into other forms of investment are no part of our obligation to our stockholders. And as long as the department store business produces a satisfactory return on investment, we will stick with it.



But there can be no sustained profit without growth. What are the possibilities of future growth? Our growth is linked closely to the population growth—urban and suburban—of America. We always have tried to keep it that way, and we shall keep it that way in the future if our foresight is clear enough.



Here again, our policy is rooted in experience and tradition. Filene's, Abraham & Straus, Lazarus—all were originally small establishments with a small line of goods. Each of them, as the needs of the community around them grew, expanded their merchandise, adding more and more items in response to demand, enlarging their stores; in the end, even adding new stores. This expansion was rooted in the growth of the communities which they served.



With 1945 and the end of the Second World War, this policy of growth really came into its own. You all know the story of the American economy in the past twelve years. Towns blossomed into cities; whole new suburbs came into being on the outskirts of our major metropolises; factories sprang up where once there had been farms and fields, spawning new settlements of their own. By the millions, young couples married, bought homes, furnished them, settled down, had babies—and bought the things they needed for a prosperous way of life. More than that—an entirely new migration of population set in, and we at Federated have followed it, as I shall explain in a moment.



We have followed *three lines of growth* since 1945: (1): We moved into new territories by buying or establishing stores in

thirteen cities. (2): We opened branches of our downtown stores in the expanding suburbs of the cities they had served so long. (3): We enlarged and renovated our existing stores to accommodate the greater number of customers and goods which now presented themselves.



We tried not to do this indiscriminately, as we shall see. But first, let us look at our major expansions.



A general drift of population was evident to what we call the "warm weather belt." From Florida, across the Gulf Coast through Texas, New Mexico, and over to California, population, industry, and retail trade were increasing rapidly. Federated followed this trend by the following expansions:

- * In 1945, we bought Foley's in Houston
 - * In 1947, we bought Halliburton's in Oklahoma City
 - * In 1951, we bought a second store in Texas, Sanger's of Dallas
 - * Between 1952 and 1954, we opened new stores under the name of Fedway in eight flourishing communities in Texas, New Mexico, and California
 - * In 1956, we moved into Florida in a major way with the acquisition of Burdine's and its five stores, three in Miami area, one in Fort Lauderdale, and one in West Palm Beach
- Outside of the "warm weather belt," in a city very like Cincinnati, we purchased, in 1948, the Boston store of Milwaukee.



These have been our major expansions of the last twelve years—from the five stores in the Federated group twelve years ago to a total of ten divisions.



Our second type of growth has been, we believe, equally significant.

* Several of our major stores—Filene's, Bloomingdale's, Abraham & Straus, the Boston Store, Sanger's, Burdine's—have opened branch stores within recent years. This phase of our expansion has built the number of branch stores to 23, with seven more in various stages of planning, including a major one here in the Cincinnati metropolitan area.



What are the concrete results of this expansion policy?

A few comparisons will tell most of the story:



The area of store and service building space that we use has more than doubled in the past twelve years while our sales were tripling.

Within this growth of physical space there is an enormous jump of branch store space from 182,000 square feet in 1945 to 2,180,000 square feet today.

And, whereas twelve years ago our stores were supported by only enough parking space for about 700 cars on a busy day, today our parking areas can handle over 40,000 cars a day.

One half of our sales growth since 1945 has come from new acquisitions and new branch stores, stores that we did not operate or did not exist twelve years ago. The other half of our growth has come from doing a better and better job in the stores with which we started.



In 1945, a large share of our business was concentrated in the two States of Massachusetts and New York. Today we are a geographically diversified company with substantial portions of our sales coming from the Midwest, Southwest, and Southeast as well as the Northeast.



While we financed this expansion (and, at the same time, handled the impact of inflation on our business), we have been able to strengthen our capital structure.

Roughly 60 percent of the growth in our capital and surplus in the past ten years has come from plowed-back earnings and about 40 percent from issuance of stock, usually for the acquisition of new businesses but, in one instance, for cash. Nevertheless, we have paid out as dividends over this period half of the earnings available for our common stock.



All this is, we believe, dramatic evidence of growth. But even more important is the fact that this growth was a part of the growth of America, in response to evident need.



We believe this to be so. Let me explain why.

We have preceded each expansion—whether it is the acquisition of a major store or the opening of a branch store—by careful studies of the community to be served. It is a fundamental belief with us that before we commit ourselves to a new expansion, we should know the population trends, income groups, and sales opportunities of the area into which we plan to move. To this end, Federated maintains and actively uses a research staff studying not only the metropolitan areas which we already serve but other areas that offer challenging possibilities, areas into which we might move.



These possibilities do not always exist where one might think they would. For example, in most metropolitan areas branch stores are the accepted means for retailing growth. But Foley's in Houston and Lazarus' in Columbus have none as yet. In both these cities our stores are the leading ones, and our studies showed that downtown facilities and highways feeding into them were more than adequate to handle the shopping needs of people in their respective retail zones. Both stores were able to offer a wider and deeper assortment of goods than a branch store could; both were sufficiently accessible so that customers felt no need to change their long-established shopping habits. Expansions there have been confined to enlargement and renovation of the downtown stores and to enlargement and improvement of parking garages.

This is what we mean by controlled expansion. We believe this is wise growth, not growth run wild.



In every case, we have held to another principle rooted in the tradition of our parent stores—completeness. Based on our day-to-day sensitivity to the needs, desires, and habits of the communities into which we have moved, we try to maintain our tradition of “one-stop shopping.”



For example, we happen to know of a mother in Hempstead, Long Island, who went shopping for her daughter shortly after Abraham & Straus opened its branch store there. Her daughter was leaving for summer camp, and mother had 38 items on her shopping list. She was able to get 36 of them at the new A & S store. How this was possible will be explained later; for the moment, the important fact is that it *was* possible. This housewife, from then on, when faced with a shopping tour, would probably be among those who automatically say: “Let’s go to A & S; I *know* that I can get what I need there.”



There can be no profit without growth, and there can be no growth without capable people to produce and direct it. In Federated department stores the emphasis is on developing *people*.



At a dinner given for my brother, Simon Lazarus, shortly before his death in 1947, four out of every five executives who attended had been raised throughout their business lives within the Lazarus store. That, I consider, is quite a testimonial to the opportunity afforded in our company—for what was true of Lazarus’ at that time is generally true of Federated today.



There is opportunity for young people to grow with us which is equal, I firmly believe, to that offered by any business.

With us, capable young people are able to attain executive responsibility and to move fairly rapidly into good income brackets. Let me back up that statement with just one illustration:



At the end of the Second World War a bright 26-year-old came back to one of our stores. Before he went off to war, he had been a part time stock boy and then a salesman. He came back as a salesman at \$50 a week in August 1946. Within a year he had become, first, an assistant department manager and, then, a department manager. As manager, he moved through three departments in the following two years, taking bigger responsibilities and earning a larger income with each move. He went from \$50 a week to \$10,000 a year in less than four years. Today, he merchandises a large part of a major store and his income has considerably more than tripled from the last figure I mentioned.



There is great opportunity for advancement, but I would like to digress a minute to talk about the fun, pleasure, stimulation—call it what you will—in running stores. The real excitement of life is in dealing with people, the endlessly varied individuals of the human race—and in Federated stores we deal with literally millions of people every year.



They come to us in New England and California, in New York and New Mexico, in Wisconsin and Florida—in all the diverse areas of the United States; and each of them has some need, some wish to be fulfilled. Some may know precisely what they want; some may know generally; some may come to us and ask us outright for help in finding a particular thing to solve a particular problem.



And in our dealings with them some wonderful and some crazy things can happen. Let me tell you about an extreme case.

At Foley's, our Houston store, for instance, there was an incident a few years ago which easily could have been a minor disaster. A man came in from a small town a few miles away to put his wife's fur coat in storage. As sometimes happens in even the best regulated establishments, we lost the coat. It simply couldn't be found anywhere. It had been insured for the minimum required amount—\$200—but the customer now informed us that \$200 did not even begin to cover the actual value of the coat, which he maintained was \$1,000. He wanted us to pay the difference—\$800.



We could, of course, have refused, and in a normal adjustment case we probably would have. But as I have said, this was an extreme case, and we didn't refuse. We paid.



Do you know what happened? Within a month, from the small community where this man lived, we had scores of new charge accounts, all of them without any effort on our part. This man, who might easily have become our lifelong enemy, was so impressed by the way we handled the loss of his wife's coat that he talked about it all over town and, in so doing, made us a new host of friends we never had had before.



That sort of thing—the direct dealing with human problems—in itself has fascinating opportunities for the young people who come to us for a career. But beyond that, we offer an organizational structure which is uniquely challenging to young people's incentives and ambitions.



At the head of our organizational chart, as we conceive it, stand our customers. They must be able to find in our stores the merchandise they want, with the kind of service they wish, offered at the time they desire to buy it and at prices which are reasonable and competitive. And right here is the essence of the challenges to all of us—right here begins the ladder of opportunity.

For immediately in contact with the customers, at the head of our actual organizational structure, are the selling departments, where most of our young employees begin their career. Now, in visualizing this, you must picture a department store as it actually is—not just one great store, but made up of about 150 little stores, each with its own specialized line of goods, each with its own challenge of keeping abreast of customer desires and meeting customer needs. It isn't just a matter of standing behind a counter and selling something—it is knowing what the customer will want to buy today, tomorrow, and the day after, and planning and stocking accordingly. Thus, in the 150 little individual stores that make up a big Federated department store, the thousands of day-to-day decisions must be made which will determine the growth and profitability of the store as a whole.



That is responsibility of a very high order. And it is the kind of responsibility which comes to a Federated associate very early in his or her career. If a new employee shows aptitude and initiative, he can very quickly become a key member of our organization.



Consider, for instance, the responsibilities of the man who manages the toy department at a large Federated store. In the first place, this department alone—this store within a store—may have an annual volume of a million dollars. Any man who is in charge of a million dollar business can justifiably feel that he has attained a position of some importance—and we treat him accordingly. He is the boss of his department; he does the planning for it, the buying, the presentation, oversees its operation in all its various phases—in effect, he runs his own store. And, he runs it, if he runs it well, with guidance but without interference from above.



And it is surprising to discover how intricate, how challenging, the details of running a toy department can be. You will learn,

for example, that many customers will abandon their normal rules of purchasing when it comes to getting toys for their children. Often people who will buy only medium-priced necessities for themselves will buy high-priced playthings for the kiddies. The best-selling bicycle at Lazarus' one recent Christmas was not a medium- or low-priced make, but the most expensive one in the store—an English bike that sold for \$96.



Then there is the presentation of the department. How can it be made more attractive to the kids and their parents? One thing is to let them handle the toys—so we do. Another thing is to stage little extra attractions—puppet shows, movies, plays, demonstrations. Ingenuity and inventiveness, an understanding of what children want and how to give it to them, can reap considerable rewards.



And, of course, the toy department manager must make his own decisions about buying. He has to spot trends, to watch the manufacturers, to attend the big toy fairs like the Toy Shows in New York and Europe, to make shrewd and educated forecasts in his own mind as to what the shape of toys will be each coming year. And thus, within the framework of the larger store and under the watchful guidance of its top management, he functions, nonetheless, with almost the same freedom and responsibility as an independent merchant.



A good department manager may do all these jobs himself. An excellent department manager, one destined to go places, will use another approach. When you analyze a toy department, you find that it is made up of several different kinds of toys—several different little businesses. There are, for example, wheel toys like bicycles, tricycles, scooters, and wagons. There are dolls. There are hobby shop gadgets—and some other categories. An excellent toy department manager will spot among his associates some outstanding young people. To one of them he will begin teaching the wheel toy business, gradually shifting responsibility and

decision-making for that kind of toys to that young man or woman. And then he will pick another candidate to whom he will start teaching and delegating the ordering, presentation, and selling of dolls or games or playground equipment. And, thus, you find a group of sub-department managers springing up under an excellent department manager, each an eager young merchant ready to take over when the boss who trained him gets the promotion he deserves.



And with this single basic policy we manage to accomplish three very important things: we maintain the closest possible contact with our customers, on a true "small store" level; we try to break down our costs in detail and thus know how each department and category of merchandise is performing; and we create new executive talent right where the ladder to success begins.



This system is basic throughout the structure of a Federated department store. We are, in a sense, the most decentralized of operations—an organization which is given direction by management but functions at the selling department level.



Within the framework I have described, the stores and their departments function with a high degree of autonomy. The Federated organization in Cincinnati manages the money, takes care of taxes on the federal level, handles legal problems and insurance and formulates, for consideration by the directors, the major decisions affecting Federated as a whole.

In addition, we maintain a research activity that continually investigates the good jobs done in all aspects of our business by any one store, and communicates them to the other divisions. Poor jobs receive equal attention. It conducts studies on problems of common interest in which it originates outlines, but field work is carried out by the stores according to agendas which the stores themselves help to develop. We also maintain an architectural and fixture

planning department that is of particular help to the divisions that cannot profitably maintain such activities on their own.



But how does a store actually take shape physically? Here we come to another aspect of our business which makes it such an endlessly varied and fascinating one—the wonderfully challenging field of store engineering.



There are, of course, different schools of thought on how a store should be laid out. One which was prevalent for a long time was to present the customer, on her way to the particular thing she wanted to buy, with all sorts of other things she *might* want to buy—to lead her, in effect, through a distracting sort of labyrinth which *might* put all sorts of ideas into her head concerning things she ought to have.



To us, this sort of layout could lead too easily to customer frustration and unhappiness, as well as to irritation about the difficulty of finding things. So we have tried to make merchandise in every case readily available and to group our items with related things in a natural and logical way.



Foley's of Houston is an example of how a store can be planned to make all of the departments on a floor easily accessible for the customer. Foley's is a square building filling a complete block. Each floor, therefore, is a square. The escalators are in the center of the square. The departments radiate outward from the escalators like spokes from the hub of a wheel. The customer has a clear line of vision into each department on the floor, and a few steps will take her from the escalator to the merchandise she wants.



An older store presents different problems. Here an ideal layout such as that of Foley's new building is generally not attain-

able. Lazarus' in Columbus, for instance, is rectangular; when we decided to re-lay out our floors there, we had to find a different solution. We did it by running one long, clear aisle the length of the floor, adjacent to the escalator. Thus, when a customer steps off, she sees a wide and attractive avenue inviting her to wander the entire length of the floor—and opening off it, clearly identified departments.



As I said earlier, a major Federated department store carries some 275,000 different items. As a matter of fact, when you consider color, size, and fabric variations—like a little spool of white thread and a big spool of blue—the number rises to something over a million and a half. We found that out when we began planning how to put our stock records on electronic record-keeping machines. How in the world can you take all these different items, from pins and picture frames to handbags and home freezers, put them within four walls and make them easily accessible to customers?



It's a big job, and a fascinating one. To handle the job we have to classify our merchandise. This would be a fantastic task were it not for the fact that, here again, our departments function as small individual stores, each doing the job itself for its own line of goods. Our toy department manager, for example, breaks down his department into all of its various sub-divisions—mechanical toys, stuffed animals, dolls, games, hobby shop supplies, wheel toys, playground equipment. We seek always in our layout and presentation to achieve a clear identification of classifications and even sub-classifications of merchandise so that a customer can readily find what she wants.



It was in our stores, for example, that ready-to-wear apparel was first presented by size. If you need a shirt, if your wife is looking for a dress, if your son wants a pair of slacks or your

daughter a pair of stockings, what is the first question each of you would ask a store? Obviously: "Do you have my size?" A store must convince you that what it has will fit you before you become interested in color, fabric, or style. So our stores long ago started to group apparel by size—wherever size is important to the customer—and to identify each size group clearly and boldly with signs. This practice is so universal now that it no longer seems striking. Yet only last month I heard a traveller back from Europe say that his wife had given up trying to buy a sweater in a London department store. She couldn't find where her size was kept.



Size isn't always the most important feature of merchandise to a customer. Let's return to the toy department. If you or your wife go shopping for a mechanical toy or a game for a grandchild, you will find them arranged by age groups. The reason is obvious to every parent or grandparent in this audience. Whatever the controlling feature is, we try to emphasize that feature in presenting our merchandise. Thus, careful classifying of our business helps us to help our customers.



Classifying helps us to help ourselves, too, in what today is a vital area of any business: cost reduction. By classifying and subclassifying our goods and by keeping our records accordingly we try to get our hands on our costs. If our toy department manager simply had lump-sum expenses for his whole department, they wouldn't tell him very much. Costs of handling, displaying, and delivering are a lot different for bicycles than for dolls. Only when they are broken apart can management come to grips with them and try effectively to reduce them.



This business of cost analysis and reduction has always been to me one of the most fascinating in retailing and I would like to emphasize its very basic importance. We are engaged in selling

customers two things in combination: merchandise and services. The merchandise is the basic article you buy. The services are every function we perform to bring it to you such as buying, handling, selling, delivering and, if you wish, extending you credit. To be successful merchants, we must know two things:

First, what is the cost of the merchandise and of each layer of service that we add?

Second, what combination of merchandise and services do our customers want, item by item?



Knowing those two basic things—and acting on them—we in this company believe nothing can check our growth. Knowing these two things we can adjust to any conditions, economic or competitive.



We now come to the end of our story. Once more, I would like to ask you to project yourselves into the future—not as far ahead as the Year 2957, but just for the next few years. How do we see these years? What are we doing to prepare for them?



We see them, first of all, as years of further growth. We believe that the American economy is a consumption economy. We believe fundamentally that there will be as much production in this Country as consumers are willing and able to absorb. And we believe that great growth of population and of family disposable income still lies ahead of us.



We are confident that we will be ready for these years and will be able to exploit what they have to offer. We have been looking ahead into them, through our research staff, in all manner of ways.

What goods will our customers want, and what will the market opportunities afford us to answer these wants? Searching for the answers to these questions, our stores are constantly examining all the pertinent fields of production from wash cloths to walkie-talkies, from drip-dry suits to drugs.



What services will our customers want? Will installment buying continue to be a keynote of our times? Will our customers want more and more frequent deliveries? Where will they want to shop? Will they want branch stores?



We see that we will be expanding even further in three areas: in the downtown business areas which continue to be a focal point of a large majority of our customers who seek the highest degree of completeness in all lines of merchandise; in the suburban areas where customers seek convenience of access, and in the new, rapidly developing outer ring of Suburbia which, while it may not support complete, full-line stores, can and will continue to offer opportunities for smaller branches with certain specialized lines of goods.



It is a bright future that we look into! Last year, stimulated by prosperity and the increase in population, retail sales in America rose to \$190 billion. Over the years, the annual increase is about 4 percent—a rate of gain which, compounded and extended over twenty years, indicates that by 1976 retail sales in this Country will be doubled, approaching a breathtaking \$400 billion yearly.



Even without new acquisitions, if we can keep pace with this projected rate of growth, we should do a billion dollars worth of business in some year not too far distant. We believe we have the

strength to do it, a strength rooted in the merchandising tradition of the family store! We believe we have the experience to do it, an experience based on three-quarters of a century in which our founding stores grew from small beginnings to eminence in the merchandising field. And we have the will and the initiative to do it—the will and initiative of a corporation which is young in heart and in personnel—with reasonable exceptions—and young in the ambition to share to the fullest extent, as we shared the roots of this Nation, in its years of greatest growth.

THE END



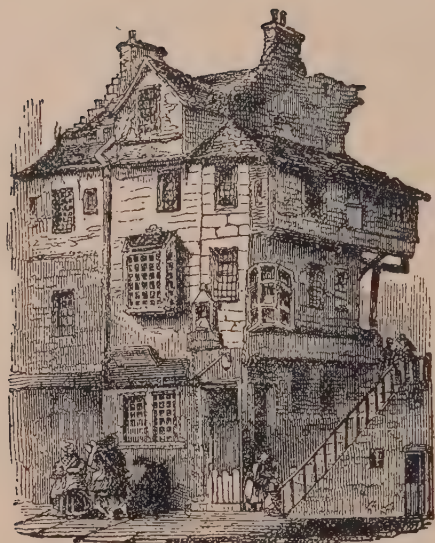
*“Actorum Memores simul
affectamus Agenda!”*





THIS NEWCOMEN ADDRESS, *dealing with the history of*
FEDERATED DEPARTMENT STORES, *was delivered at the*
“1957 Cincinnati Dinner” *of The Newcomen Society in*
North America, held at Cincinnati, Ohio, U.S.A., on
October 24, 1957. MR. LAZARUS, the guest of honor,
was introduced by JOHN B. HALL, President, The
Kroger Company; Member of the Cincinnati Commit-
tee, in American Newcomen. The dinner was presided
over by G. CARLTON HILL, President, The Fifth Third
Union Trust Company of Cincinnati; Chairman of the
Cincinnati Committee, in this inter-
national Society.





"A major Federated department store carries *some 275,000 different items!* As a matter of fact, when you consider color, size, and fabric variations—like a little spool of white thread and a big spool of blue—the number rises to something over a million and a half. We found that out when we began planning how to put our stock records on electronic record-keeping machines. How in the world can you take all these different items, from pins and picture frames to handbags and home freezers, put them within four walls and make them easily accessible to customers?

"It's a big job, and a fascinating one!"

—FRED LAZARUS, JR.





“To meet what is likely to be a rate of growth which would mean that we would do *a billion dollars worth* of business in some year not too far distant—to meet such a challenge we believe we have the strength to do it, a strength rooted in the merchandising tradition of the family store!”

—FRED LAZARUS, JR.





“THE MODERN MIRACLE OF MERCHANDISING”—

Appropriately could the great Department Store of the mid-20th Century merit such designation! What you have read in the pages which precede is an unparalleled example of courage, resourcefulness, initiative, business judgment, thoroughness, and coordination. All of these taken together constitute Executive Management, guided by personal leadership. Our Author himself has provided this leadership!



37
4 P 17
Thomas G. Clemson
(1807-1888)

*His Influence in
Developing
Land-Grant Colleges*

ROBERT F. POOLE





"Were American Newcomen to do naught else, our work is well done if we succeed in sharing with America a strengthened inspiration to continue the struggle towards a nobler Civilization—through wider knowledge and understanding of the hopes, ambitions, and deeds of leaders in the past who have upheld Civilization's material progress. As we look backward, let us look forward."

—CHARLES PENROSE

*Senior Vice-President for North America
The Newcomen Society of England*



This statement, crystallizing a broad purpose of the society, was first read at the Newcomen Meeting at New York World's Fair on August 5, 1939, when American Newcomen were guests of The British Government

"Actorum Memores simul affectamus Agenda"

THOMAS G. CLEMSON

(1807-1888)

*His Influence in Developing
Land-Grant Colleges*

An Address in South Carolina



AMERICAN NEWCOMEN, through the years, has honored numerous seats of learning, both in the United States of America and in Canada, and has honored the memories of pioneer founders and those who have carried on, in the history of these institutions. Such a Newcomen manuscript is this, dealing with the beginnings and growth and contributions of Clemson College in South Carolina!





“Thomas Green Clemson is perhaps best remembered as the Founder of The Clemson Agricultural College of South Carolina, but he was a man also of many talents and he used those talents to aid the progress of Mankind both in this Country and in other lands. His life was one of action!”

—ROBERT F. POOLE



Thomas G. Clemson
(1807-1888)

*His Influence in
Developing
Land-Grant Colleges*

ROBERT F. POOLE
M.S., P.H.D., D.S.C., LL.D., LITT.D.

MEMBER OF THE NEWCOMEN SOCIETY
PRESIDENT
THE CLEMSON AGRICULTURAL COLLEGE
OF SOUTH CAROLINA
CLEMSON
SOUTH CAROLINA



THE NEWCOMEN SOCIETY IN NORTH AMERICA
NEW YORK SAN FRANCISCO MONTREAL

1957

Copyright, 1957
ROBERT F. POOLE



*Permission to abstract is granted
provided proper credit is allowed*



*The Newcomen Society, as a body,
is not responsible for opinions
expressed in the following pages*



*First Printing: October 1957
Second Printing: October 1957*



*This Newcomen Address, dealing with the
life and times of Thomas G. Clemson
(1807-1888) and with the history of Clemson
College, was delivered at the "1957 South
Carolina Dinner" of The Newcomen Society
in North America, held at "Clemson House"
Hotel, in Clemson, South Carolina, U.S.A.,
when Dr. Poole was the guest of honor,
on October 29, 1957*



SET UP, PRINTED AND BOUND IN THE UNITED STATES
OF AMERICA FOR THE NEWCOMEN PUBLICATIONS IN
NORTH AMERICA BY PRINCETON UNIVERSITY PRESS





INTRODUCTION OF DR. POOLE, AT CLEMSON ON OCTOBER 29, 1957, BY DR. JOHN L. PLYLER, PRESIDENT OF FURMAN UNIVERSITY, GREENVILLE, SOUTH CAROLINA, U.S.A.; MEMBER OF THE SOUTH CAROLINA COMMITTEE, IN THE NEWCOMEN SOCIETY IN NORTH AMERICA.

My fellow members of Newcomen:

To American Newcomen am I deeply indebted for the honored privilege of presenting our speaker of the evening. The gentleman we are about to hear is a personal friend of many years, and really needs no introduction to a South Carolina audience. I congratulate this Society on the aptness of its choice.



A native of this State, our speaker received the degree of Bachelor of Science from Clemson College, the splendid institution which he serves so well as President. He earned the degrees of Master of Science and Doctor of Philosophy from Rutgers University. After serving six years with the New Jersey Agricultural Experiment Station, he went to North Carolina State College as associate professor and associate plant pathologist in 1926, becoming full professor and plant pathologist two years later. He returned to his alma mater as President in 1940. This institution's growth in size and service demonstrates that its President has a "green thumb" for more than plants.



This distinguished South Carolinian has proven himself an able leader in guiding Clemson College through difficult years to pro-

vide an unparalleled service to our State. His leadership and accomplishments reveal a man of tact, determination, and unswerving devotion to duty.



His distinguished service has been recognized by numerous honorary degrees: Doctor of Science, awarded by Clemson; Doctor of Laws, awarded by the University of South Carolina; and Doctor of Letters, awarded by Furman University.



One has only to glance about the Clemson College campus to see on every hand ample evidences of this man's dynamic leadership. And behind these physical evidences stand the intangible but even more important accomplishments in a sound academic program and expanded services to State and County. South Carolina's agriculture and economy have felt the stimulating impact of Clemson's far-reaching program.



This man's leadership has not been limited to direction of his college's expanding program. He has served as President of the South Carolina Tuberculosis Association, the Southern Section of the American Pathological Association, the South Carolina Association of Colleges, the Association of Southern Agricultural Workers, the Southern Association of Colleges and Secondary Schools, and the Association of Land-Grant Colleges and Universities.



Member of numerous learned societies, a research scientist of great achievement, an author of scientific articles, our speaker has the added distinction of being an educational statesman and a Christian gentleman.



I am happy to present a beloved South Carolinian: DR. ROBERT FRANKLIN POOLE.





My fellow members of Newcomen:

THOMAS GREEN CLEMSON is perhaps best remembered as the Founder of The Clemson Agricultural College of South Carolina, but he was a man also of many talents and he used those talents to aid the progress of Mankind both in this Country and in other lands. His life was one of action! He was a recognized authority on scientific, economic, and diplomatic relations; and, upon the lighter side of life, he excelled in art, music, literature, and the social graces. His life experiences in adventure, romance, and sorrow would challenge the skill of the best fiction writers of all time.



Pennsylvania, *Mr. Chairman*, had been the home of the Clemson Family for many generations: James Clemson, Quaker from Birmingham, England, was listed as an owner of land in West Chester in 1699; his great-great-grandson, our subject, Thomas Green Clemson, born in Philadelphia on July 1, 1807, was the son of Thomas Green Clemson III, and Elizabeth Baker, daugh-

ter of a prominent Episcopal family. His father was a prosperous merchant and, at his death in 1813, he left an estate of \$100,000 to be divided among his six children:—Thomas Green; John Baker, who became an Episcopal Bishop; William; Louisa, married to Samuel Washington, a grand-nephew of George Washington; Catherine, married to a Mr. North of Philadelphia; and Elizabeth, who married The Rev. Mr. Barton, Rector of St. James Church, Lancaster, Pennsylvania.(1)



The boyhood activities of Thomas Clemson are rather vague; undoubtedly he attended schools of Philadelphia in early years. Later, he is credited with being enrolled in a preparatory school for boys in Vermont, where he became greatly interested in chemistry. Due to difficulties in finding a school suited to his needs on that subject in this Country, he decided to go to Europe for further study. Thus at the age of nineteen, he was in Paris attending the lectures of Thénard, Gay-Lussac, and DuLong at the celebrated Sorbonne Royal College of France. In 1827, he entered the practical laboratory of Robiquet, and later was admitted to the Royal School of Mines. His diploma as assayer from the Royal Mint of France was received in June of 1831.(2) (This diploma was placed in the cornerstone of the Administration Building of Clemson College sixty years later, on July 28, 1891.) While a student in Paris he took part in the Revolution in 1830, which dethroned Charles X and placed Louis Philippe upon the throne.(3) (A souvenir of that three-day fracas is in *The Fort Hill Shrine* at Clemson College; it is a large round metal plate which Thomas Clemson picked up in a Paris Street after the fighting; a circle of mysterious lettering around the border has never been deciphered.)



From 1832-1839, Thomas Clemson was engaged in Paris, Philadelphia, and Washington as a consulting and mining engineer, developing a profitable practice. He also was interested in a coal mine in Cuba, and in Mine LaMotte in Missouri. During this period he contributed numerous scientific articles to various

publications, enjoyed his hobbies of painting in oils, and playing the violin.



While living in Washington he met the family of John C. Calhoun, eminent Statesman from South Carolina. Although Clemson had boasted to friends of being a confirmed bachelor and would never marry anyone, he quickly changed his mind after meeting Calhoun's daughter, Anna Maria. He fell desperately in love with the radiant Southern belle, who at first did not share his ardent interest, but softened after his continued bombardment of affection. The love affair made rapid progress, culminating in their marriage on November 13, 1838, in the parlor at FORT HILL, the Calhoun home in South Carolina. The beautiful twenty-one-year-old brunette bride possessed an unusual amount of intellect and charm; the bridegroom, ten years her senior, was a handsome physical giant, standing at least six-feet-six in height, with brown eyes and dark wavy hair.



Shortly after the magnificent wedding, the Clemsons left for their new home in Philadelphia, but the climate there disagreed with Mrs. Clemson. Two years later they returned to South Carolina. Mr. Clemson took over the management of Calhoun's Fort Hill Plantation which had been in charge of various overseers while Calhoun was attending to national duties in Washington. As Clemson was an authority on mining, he also could oversee the operations of the Calhoun Gold Mine at Dahlonega, Georgia, which was not too far distant.⁽⁴⁾ It was at FORT HILL that Thomas Clemson had his first experience in directing a Southern plantation. He did it well. Two children were born there, a son in 1841 and a daughter in 1842. The son was named John Calhoun in honor of his grandfather, and the daughter was named Floride, honoring her grandmother Floride Calhoun and her great-grandmother, Floride Bonneau Colhoun, a French Huguenot.



In 1843, Clemson purchased a large plantation in the Edgefield District of South Carolina. His agricultural experiences at

Fort Hill and the conduct of this plantation convinced him that the *untrained* farmer was fighting a losing battle in the South. No doubt it was during these years that his sympathy was aroused for the hard-working farmers and consequently a desire to do something about it was planted in his scientific mind. Thomas Clemson was a man who thoroughly understood the value of a scientific education, and his vision for supplying that training was realized fifty years later, when Clemson College was established on the very Fort Hill Plantation.



The Calhoun-Clemson marriage has been a benefit to South Carolina in many ways and especially in its economic, social, and political aspects. South Carolina needed a man like Thomas Green Clemson; he had been trained in the best schools of Europe in the scientific knowledge of his day. In addition, his wide travel experience gave to the State his contacts with the intellectual and scientific world at large. The University of South Carolina honored him some years later by bestowing upon him the honorary degree of Doctor of Laws.(5)



Clemson's stay in the South was cut short in 1844, when President Tyler appointed him as chargé d'affaires to Belgium. No one was more eminently qualified to fill that post, because he had spent many years in Europe as a student, was a fluent linguist, and well acquainted with European manners and customs. He understood the economic, social, and political problems of both Europe and the United States of America, as well as conditions that actually existed in these countries. In that post he had opportunity to make constructive suggestions for improving cooperative endeavor and for promoting international goodwill between the countries. He had a wide circle of distinguished friends and was especially popular at the Court of Leopold I, his personal friend. The decorations of the Order of Leopold and of the French Legion of Honor were bestowed upon him. In the parlor at FORT HILL is an elaborately carved chair upholstered in red antique velvet which was a gift to Mr. Clemson from the Belgian King;

included with the chair is a tiny matching footstool which is amusing to people that are aware of the size of Mr. Clemson's shoes—size 14.



Thomas Clemson returned to the United States from Belgium in 1852. Soon afterwards he purchased a farm near Bladensburg, Maryland, only a few miles from Washington. There he was active in planting, assaying, writing scientific articles, and experimenting in agricultural chemistry. In 1856, he was instrumental in establishing the Maryland Agricultural College, and, in 1859, he was giving a series of lectures at the Smithsonian Institution on: *Chemistry Applied to Agriculture*.



On February 3, 1860, Thomas G. Clemson was appointed U.S. Superintendent of Agricultural affairs by Jacob Thompson, Secretary of the Interior. The announcement of his appointment was received throughout the Country with hopefulness and enthusiasm. *The National Intelligencer*, February 8, 1860, had this to say:

“It is not doubted that the public will appreciate and commend what has been done, and rejoice in the selection for this position a gentleman who will reflect honor upon it, and who is competent both to conceive and to execute its highest and most varied and beneficent design.”



The Quarterly Journal of Agriculture, 1860, reported thus:

“It is understood that Mr. Clemson submitted a plan for organizing a separate Agricultural Bureau to the Secretary of the Interior, but it has neither been adopted nor published.

“Mr. Clemson has been sent to Europe by Governor Thomas, the Commissioner of Patents, to purchase seeds and cuttings, Poland and Mediterranean wheat, Persian walnuts, barley and rye; garden seeds and cork-oak acorns are to be procured and either distributed or propagated at the government greenhouse here, or be distributed later in the form of young plants.”

Mr. Clemson's views are clearly set forth in his "Preliminary Remarks" of the *Patent Office Report* for 1860, as follows:

"The requirements of the present age, and the permanent importance of the subjects embraced in its operations, demand that the power of this agency of the Government should be enlarged. This opinion was expressed in the views I had the honor to submit to the Secretary of the Interior when I was called by that functionary to the position of Superintendent of Agricultural Affairs. A vast majority of the intelligent agriculturists of the Country, dissatisfied with the limited functions now exercised by the Government, not only confidently anticipate, but demand an organization at least equal in importance to that of any other department."



Thomas Green Clemson has been recognized as the *first* Secretary of Agriculture in the United States!



Clemson's well-laid plans were cut short by the threats of war between the North and South, and he resigned his agricultural post on March 4, 1861. He now was 54 years old and beyond military age; he might have remained quietly at his home in Maryland as a neutral in war, but Clemson was not a man of neutral views. His sympathy was with the South and when his views became known to the Lincoln Government, his arrest was expected. However, before that happened, he and his son, John Calhoun Clemson escaped across the Potomac in an open boat. They walked to Richmond, offered their services to the Confederate Government, and traveled on to Pendleton, South Carolina, to await orders and assignments. Mr. Clemson was assigned to the Army of the Trans-Mississippi Department of the Confederacy. He served in several capacities in connection with the administration of the mining and manufacturing of materials for explosives. His parole, dated June 9, 1865, from Shreveport, Louisiana, shows that he saw about four years of service, playing his part well to the end in devotion to the Southern cause.(6) His son, Captain John Calhoun Clemson, saw gallant service,

but was a prisoner of war for many months in the Northern prison at Johnson's Island, Ohio.



Sometime before General Lee's surrender, Mrs. Clemson obtained from President Lincoln an order passing her through the lines of the Federal Army to Pendleton, South Carolina, to be with her mother. At the close of the conflict, it was in Pendleton that Thomas Clemson and his son rejoined the family, and from then on, until his death in 1888, Clemson lived either in Pendleton or at nearby Fort Hill. Following the death of Mrs. Calhoun in 1866, the Clemsons purchased and occupied the homestead at Fort Hill. Around them revolved a large portion of the social, political, and religious activities of the State of South Carolina. Consequently, they exerted a lasting influence upon the community and were considered among the leading personalities of the era. The war had changed this prosperous community from plenty to misery and to want! Clemson voluntarily cast his lot with the South, went down with her in defeat, and then willingly gave practically all he had for her attempted restoration.



At the close of the War Between the States, South Carolina was in an almost hopeless condition; cities, churches, schools, and homes were burned; banks were made bankrupt; furniture, clothing, and food carried off or destroyed; land was seized from owners and given to the freed men; people were taxed without representation; families were left without food or the means to purchase it. This situation, resulting from an unmerciful war, the Clemsons did all in their power to relieve.



Tragedy struck the Clemson household in 1871, with the death of their 28 year old daughter, Floride, wife of Gideon Lee of Carmel, New York. Just seventeen days later, their son, John Calhoun, age 30, was in a fatal train wreck only a few miles from home. The third child, Cornelia, had passed away with scarlet fever some years previous at the tender age of three years. A

marble bust of the child, made by the famous sculptor, Hiram Powers of Paris, is in the Fort Hill Home.



Mr. and Mrs. Clemson, now bereft of all their immediate family, began to plan some use of the estate which would forever make FORT HILL a shrine to her father, John C. Calhoun, a memorial to their soldier son, John Calhoun Clemson, and, at the same time, serve some useful purpose. Therefore, the bereaved parents determined to unite in so disposing of all they had left of their property as to benefit their fellowmen in the education of the Southern boys. Consequently, they made their wills leaving their joint property to found *a college* on the Fort Hill estate. Thomas Clemson had been active in agitating a movement for economic betterment through scientific education since 1866, when he was President of the Pendleton Farmers' Society, one of the oldest agricultural societies in the United States⁽⁷⁾—incidentally, that Society, organized in 1815, has continued active through the years to the present day.



Tragedy again struck the Clemson household in 1875, when Mrs. Clemson suddenly passed away at Fort Hill with a heart attack, while Mr. Clemson was away from home. She was only 58 years of age and the last one of the Calhoun children. Mr. Clemson lived the remaining years of his life at Fort Hill, a lonely and broken old gentleman. Eventually, his mind became fixed upon the one purpose of the promise to his beloved wife, that of erecting the college they had planned. He and his friends worked hard to interest others in the great work. Mr. Clemson knew that the property of the Fort Hill plantation and his donation of money, large as it was, would not be sufficient to maintain the kind of school he envisioned; however, he had firm belief in the liberality of the State of South Carolina. He felt confident that when the citizens recovered somewhat from the changed conditions growing out of the War Between the States, his efforts to benefit the farmers would be recognized and the State would supplement his donation, supplying means necessary to establish

the school he desired. This reasoning proved to be true. Thomas Clemson could foresee that a practical education was now necessary to meet the needs of the Southern people, therefore, in life he planned for the establishment of an agricultural college, and in death his bequest made it possible.



On Saturday morning, April 6, 1888, Thomas Green Clemson quietly passed away at Fort Hill. He was 81 years old, and the immediate cause of his death was pneumonia. He had been in declining health during some years, and he seldom left home or entertained visitors except a few intimate friends including a favorite Methodist Minister from Pendleton. He was buried in the Churchyard of St. Paul's Episcopal Church in Pendleton, beside the graves of his wife and son.(8) In 1891, the Clemson College Board of Trustees had a tall shaft erected at his grave, bearing this inscription: "Thomas Green Clemson, Founder of Clemson Agricultural College, Born July 1, 1807, Died April 6, 1888."



Clemson's will gave his Fort Hill estate and the bulk of his fortune to the State of South Carolina for the purpose of erecting an agricultural college.



"Feeling a great sympathy for the farmers of the State, and the difficulties with which they have to contend in their efforts to establish the business of agriculture upon a proper basis, and believing that there can be no permanent improvement in agriculture without a knowledge of those sciences which pertain particularly thereto, I have determined to devote the bulk of my property to the establishment of an agricultural college upon the Fort Hill Place. My purpose is to establish an agricultural college which will afford useful information to the farmers and mechanics; therefore it should afford thorough instruction in agriculture and the natural sciences connected therewith; it should combine, if practicable, physical and intellectual education and should be a high seminary of learning in which the graduate of the common schools can commence, pursue and finish a course of studies terminating in thorough theoretic and practical instruction in those sciences and arts which bear directly upon agriculture. But I desire to state plainly, that I wish the Trustees of said institution

to have full authority and power to regulate all matters pertaining to said institution, * * * but to always bear in mind that the benefits herein sought to be bestowed are intended to benefit agriculture and mechanical industries.”



His bequest was accepted by the South Carolina General Assembly, and the first buildings were started in 1891. When the school opened in 1893, the enrollment was 446 students and fifteen faculty members.



The progress through its 64 years existence as the State College of South Carolina, founded also under the Morrill Land-Grant Act of 1862, has been at a rapid pace. Students come from all over South Carolina, from practically every State in the Union, and from a number of foreign countries. The 1957 enrollment was 3,210, with 281 faculty members. FORT HILL, the Calhoun-Clemson Home which is situated in the very center of the college campus, has been preserved in all its ancient glory. Mr. Clemson's Will provided, as already stated, for the old mansion to be preserved as a *shrine* in honor of his wife, and son, John Calhoun Clemson, and his father-in-law, John C. Calhoun. There on display are the family portraits, furniture, silverware, and bric-a-brac too numerous to mention. Clemson's *seven-foot* walnut bed, custom-made to care for his extreme height, remains in his bedroom; on it are the original linen pillowcases with hand-knit lace, as well as the white marseilles spread. Thousands of visitors come to FORT HILL each year to pay homage to its illustrious past.



Thomas G. Clemson was an artist of merit and a connoisseur and collector of art. He studied in Paris as a young man from the best masters. Throughout his life, with its many reverses and sorrows, he found recreation and consolation in painting.(9) Many of the pictures in his collection were painted by himself; others were collected by him during travels in Europe. Some he copied from the private gallery of King Leopold I, of Belgium. Mr. Clemson also was interested in music: he was a violinist and

composed several numbers for that instrument. He had a special liking for dogs; at one time, he owned as many as twenty-five or thirty bird dogs. A story is told of one extra-fine *bird dog* that he gave orders to only in French, as the dog did not understand English. He also was a horse fancier, and always kept a few fine ones of purebred stock.(10)



Clemson's old housekeeper, who died in 1945 at the age of 97, had this to say about him:

"He was always kind and considerate, especially so to those that worked for him. He liked French food and plenty of milk and butter. Soup and dessert were always on the menu for dinner regardless of what else he had, and the soup was served from a large silver toureen with a silver ladle. Mr. Clemson often looked over to where the college now stands and said 'that's the place for the institution. I want it to be a school for teaching every farm and city boy in South Carolina.'" She added: "I have lived to see it grow from year to year, and I love every brick and every boy in it."(11)



Thomas Green Clemson lives on in the college that he made possible, and his name is inseparably linked with the agricultural and industrial progress of the South. His last years were spent as a lonely semi-invalid, brooding over the deaths of all his beloved family. Outsiders looked upon him as an eccentric old man who had some queer ideas on life and religion, but his intimate friends knew the greatness of his heart and mind, and were sympathetic toward the little peculiarities that are common to advanced age. The Minister who was with him to the end, said: "He died in peace, trusting in the all saving Grace of God in Christ Jesus."(12)



This generous and noble man's conscientious concern for the welfare of the Southern people has won for him a permanent and venerated place in their hearts.

The memory of Thomas Green Clemson will forever be revered and honored. His sterling qualities shine through all his varied interests—the personal letters and published articles he wrote, the public addresses he made, and the friendships he formed, plainly portray his exalted character.



A life-size statue of Thomas Green Clemson, the work of a former Clemson College student(13), occupies a prominent place on the grounds, in front of the Administration Building of the College which bears his name. A bronze plaque preserves the following inscription:

THOMAS GREEN CLEMSON BORN IN
PHILADELPHIA, JULY 1, 1807 DIED AT
FORT HILL, APRIL 6, 1888 SCIENTIST
DIPLOMAT SOLDIER FOUNDER OF CLEM-
SON COLLEGE AND BENEFACTOR TO
THE SONS OF HIS ADOPTED STATE.

THE END

"Actorum Memores simul affectamus Agenda!"

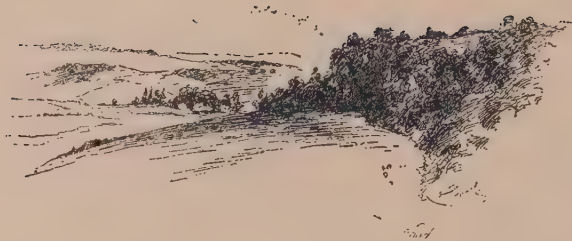




BIBLIOGRAPHY

- (1): Sketch of THOMAS GREEN CLEMSON prepared by U.S. Department of Agriculture for Clemson relative, L. M. Clemson Smith, Washington, D.C. Used through the courtesy of Mr. Smith.
- (2): *Ibid.* p. 1.
- (3): Holmes & Sherrill, THOMAS GREEN CLEMSON (His Life & Works), p. 8, Garrett & Massie, Richmond, Virginia, 1937.
- (4): Letter from Clemson to Calhoun, dated July 15, 1842, from O'Bar Mine in Georgia.
- (5): Holmes & Sherrill, THOMAS GREEN CLEMSON, p. 42.
- (6): *Ibid.* p. 26.
- (7): Newman & Stribling, PENDLETON FARMERS' SOCIETY, Foote & Davies Company, Atlanta, Georgia, 1908.
- (8): "*News & Courier*," Charleston, S.C., account of Clemson's death and burial, 1888.
- (9): Mrs. P. H. Mell's list of Paintings at Clemson College.
- (10): Holmes & Sherrill, THOMAS GREEN CLEMSON, pp. 37-38.
- (11): Personal interview with Mrs. Jane Prince, Clemson's housekeeper, 1940.
- (12): Excerpt from letter by The Rev. N. B. Clarkson, Pendleton, S.C., dated May 21, 1888, to "*News & Courier*," Charleston, S.C.
- (13): Sculptor A. Davidson.





THIS NEWCOMEN ADDRESS, *dealing with the life and times of THOMAS G. CLEMSON (1807-1888) and with the history of CLEMSON COLLEGE*, was delivered at the "1957 South Carolina Dinner" of The Newcomen Society in North America, held at Clemson, South Carolina, U.S.A., on October 29, 1957. DR. POOLE, the guest of honor, was introduced by DR. JOHN L. PLYLER, President, Furman University, Greenville, South Carolina; Member of the South Carolina Committee, in American Newcomen. The dinner was presided over by the SENIOR VICE-PRESIDENT FOR NORTH AMERICA, in this international Society.





“Thomas Green Clemson was a recognized authority on scientific, economic, and diplomatic relations; and, upon the lighter side of life, he excelled in art, music, literature, and the social graces. His life experiences in adventure, romance, and sorrow would challenge the skill of the best fiction writers of all time.”

—ROBERT F. POOLE





“Thomas Green Clemson lives on in the college that he made possible, and his name is inseparably linked with the agricultural and industrial progress of the South. His last years were spent as a lonely semi-invalid, brooding over the deaths of all his beloved family. Outsiders looked upon him as an eccentric old man who had some queer ideas on life and religion, but his intimate friends knew the greatness of his heart and mind, and were sympathetic toward the little peculiarities that are common to advanced age.”

—ROBERT F. POOLE





“The memory of Thomas Green Clemson will forever be revered and honored. His sterling qualities shine through all his varied interests—the personal letters and published articles he wrote, the public addresses he made, and the friendships he formed, plainly portray his exalted character.”

—ROBERT F. POOLE





AMERICAN NEWCOMEN, *interested always in the history of educational institutions as contributing to the advance of Material Civilization, takes satisfaction in this informal, highly informative, and wholly human Newcomen manuscript. It serves two happy purposes: first, to memorialize Thomas G. Clemson (1807-1888), whose influence was great in developing America's Land-Grant Colleges; and, secondly, to record the life-story of the seat of learning in South Carolina:*

*Clemson College—which his benevolence
made possible!*



“Dan River Mills”

*A Story of 75 Exciting
Years in Textiles!*

(1882-1957)

WILLIAM J. ERWIN



586

1957



"Were American Newcomen to do naught else, our work is well done if we succeed in sharing with America a strengthened inspiration to continue the struggle towards a nobler Civilization—through wider knowledge and understanding of the hopes, ambitions, and deeds of leaders in the past who have upheld Civilization's material progress. As we look backward, let us look forward."

—CHARLES PENROSE

*Senior Vice-President for North America
The Newcomen Society of England*



This statement, crystallizing a broad purpose of the society, was first read at the Newcomen Meeting at New York World's Fair on August 5, 1939, when American Newcomen were guests of The British Government

"Actorum Memores simul affectamus Agenda"

"DAN RIVER MILLS"
*A Story of 75 Exciting
Years in Textiles!*
(1882-1957)

An Address at New York



AMERICAN NEWCOMEN, *through the years, has honored numerous pioneer industrial enterprises, both in the United States of America and in Canada. Such a Newcomen manuscript is this, dealing with the history of Dan River Mills in Virginia and marking its 75th Anniversary (1882-1957). During three-quarters of a century, these great mills have been noted for pioneer contributions in Textile Manufacturing in America!*





“Man has always held his creative fellow in high esteem—the ancient Greek philosopher, the Renaissance artist, the Elizabethan poet, our own Eighteenth Century political thinkers, and the others before and since who have left their mark on our culture. This is as it should be.

“Yet it occurs to me that the single thing which distinguishes our culture from any of the past is *its material progress.*”

—WILLIAM J. ERWIN



"Dan River Mills"

A Story of 75 Exciting Years in Textiles!

(1882-1957)

WILLIAM J. ERWIN

MEMBER OF THE NEWCOMEN SOCIETY

PRESIDENT

DAN RIVER MILLS

DANVILLE

VIRGINIA



THE NEWCOMEN SOCIETY IN NORTH AMERICA
NEW YORK SAN FRANCISCO MONTREAL

1957

Copyright, 1957
WILLIAM J. ERWIN



*Permission to abstract is granted
provided proper credit is allowed*



*The Newcomen Society, as a body,
is not responsible for opinions
expressed in the following pages*



*First Printing: October 1957
Second Printing: October 1957*



*This Newcomen Address, dealing with the
history of Dan River Mills in Virginia and
marking their 75th Anniversary (1882-
1957), was delivered at a National New-
comen Dinner of The Newcomen Society
in North America, held in Ballroom of The
Pierre, at New York, N.Y., U.S.A., when
Mr. Erwin was the guest of honor,
on October 31, 1957*



SET UP, PRINTED AND BOUND IN THE UNITED STATES
OF AMERICA FOR THE NEWCOMEN PUBLICATIONS IN
NORTH AMERICA BY PRINCETON UNIVERSITY PRESS





INTRODUCTION OF MR. ERWIN, AT NEW YORK ON OCTOBER 31, 1957, BY FLOYD W. JEFFERSON, CHAIRMAN OF THE BOARD, ISELIN-JEFFERSON COMPANY, INC.; MEMBER OF THE NEW YORK COMMITTEE, IN THE NEWCOMEN SOCIETY IN NORTH AMERICA.

My fellow members of Newcomen:

YOUR guest of honor tonight is a dear personal friend and a close and esteemed business associate, and I enjoy a rare privilege in having the opportunity of presenting him to his fellow members and to our guests.



Who's Who in America is a respected volume, but I hope that the shade of the late A. N. Marquis will forgive me if I say that it is dull reading. I do not propose to give you a biographical sketch of our guest, but it is important for me to recognize him as the President and dynamic leader of the great Dan River Mills of Danville, Virginia founded in 1882, the corporation whose 75th Anniversary we are celebrating tonight.

This is the Diamond Anniversary of Dan River and the brightest gem in its diamond diadem is its President.



Since he was called to the Chief Executive position in 1953 the profits and importance of this fine old Virginia institution have increased commensurately with the knowledge and ability which its President has brought to the company.



He combines in one person the qualities of manufacturer, merchant, and Chief Executive.

He brings to the council table calm judgment, well considered opinions, and wise recommendations.

He has won the confidence of stockholders and employees, both groups being made to realize that profits are the heart of progress, but that profits must be plowed back for plant rehabilitation and expansion, guaranteeing a competitive position in the industry and lucrative jobs for greater numbers.



Under his inspired leadership there is within the organization a marvelous esprit' de corps and a harmonious working relationship between Management and Labor.

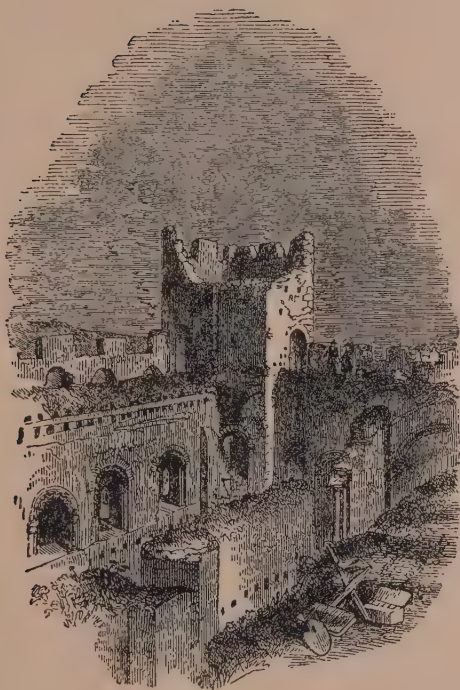
In the last twenty years of his business life he has occupied top executive posts in several of the largest and most important textile corporations, his history is one of unbroken success, and he brought to Dan River a wealth of knowledge and experience.



He holds many directorships and chairmanships, yet has found time to serve as college trustee and on the Boards of many civic and charitable organizations.



It is with great pride that I introduce our fellow member of Newcomen from North Carolina, the President of Dan River Mills: WILLIAM J. ERWIN.



My fellow members of Newcomen:

MAN has always held his creative fellow in high esteem—the ancient Greek philosopher, the Renaissance artist, the Elizabethan poet, our own Eighteenth Century political thinkers, and the others before and since who have left their mark on our culture. This is as it should be.



Yet it occurs to me, *Mr. Chairman*, that the single thing which distinguishes our culture from any of the past is *its material progress*. This advance in material things—the abundance of goods we now take for granted—is not mere chance; it too is the work of creative men—men who have translated science into products, who have transformed luxury into need, who have con-

ceived of the world as the marketplace, and who have welded together diverse peoples into vast organizations to accomplish their imposing designs. These men too are worthy of our esteem.



It is at once the special privilege and the great opportunity of this Society to chronicle the achievements of these men of business and industry, and the history of the institutions they have built. As a diligent reader of the Society's proceedings, I am secure in the knowledge that the task is being done well indeed.



This is the 75th year since the founding of Dan River Mills. It is a year in which many honors have been bestowed upon our company, but among them, none is greater than this opportunity to have its history placed in the archives of this Society.



The beginning, as you might suspect, was not impressive. The wildest dreamer, in the little town of Danville, Virginia, back in 1882 would scarcely have envisioned the Dan River of today—huge plants along the banks of the Dan River, additional plants in fourteen other communities stretching across South Carolina, through Georgia to Alabama, plants with more than 800,000 spindles and 18,000 looms, and just under 18,000 employees.



Seventy-five years ago the times were not propitious for dreams. These were hard times in Southside Virginia. The War Between the States was a bitter memory; the grinding poverty in its aftermath was still prevalent; reconstruction was a damper on the aspirations of the people. But in Danville, as elsewhere in the South, there were men who labored and saved, and in the years shortly after the war, managed to accumulate modest funds for investment in new enterprises.

Dan River Mills, originally chartered as The Riverside Cotton Mills, was founded by six citizens of Danville. Three of them were brothers: Robert Addison, John H., and James E. Schoolfield. Robert Addison Schoolfield began clerking in a country store at the age of sixteen. Later, he was a partner with another brother in a general store, but had left this partnership in 1881. John was a merchant and tobacco manufacturer, and, with his brother James, a promoter and director of the Danville and New River Railroad, a short line running to Martinsville, Virginia, a distance of about 27 miles.



The other organizers were Benjamin F. Jefferson, Confederate veteran and a coal, wood, and lumber dealer; Dr. H. W. Cole, a physician, who at the time the mills were founded was town coroner and proprietor of a drug store; and Thomas Benton Fitzgerald, also a Confederate veteran and proprietor of a contracting and brickmaking firm. Among the founders there was not one even remotely connected with the textile industry, not one experienced in the manufacture or sale of cotton fabrics.



The record today is not entirely clear as to why the making of cloth was selected as the logical business to enter. Throughout the ravaged South the cry was for new industry (how familiar the cry!) and textile mills, which had received their start in the ante-bellum period became the predominant new industry. Being astute men, the founders of Dan River were undoubtedly apprised of the general conditions favoring the establishment of cotton mills in the South. However, there were more decisive factors close at home, and one of these was water power.



In the immediate post-war years, there was considerable local enthusiasm for water transportation on the Dan River, with Danville to become a thriving river port. To by-pass the shoals op-

posite the town, the Roanoke Navigation Company had built a log and plank dam to divert water through a canal. The bustling port never materialized, but the dam and canal left by the navigation company had the potential for water power for industry. At least two of the organizers of the The Riverside Cotton Mills owned water power rights, and transferred such rights to the company in part payment for their original stock subscriptions.



It reveals something of the character of the founders to report that a second decisive factor in the organization of the cotton mills was a sincere desire to afford work to white men and women in Danville to whom unemployment was a familiar and persistent problem. The Danville of 1882 was a center of tobacco trade and manufacturing, with numerous warehouses, stemming plants, and factories making plug, twist, and smoking tobacco. Employment in these enterprises was largely seasonal, and largely limited to colored, who at that time comprised the majority of the town's population. Other industry was essential to provide year-round work, and the cotton mill proved to be the answer.



The cynic might argue that this pious desire of the founders was merely afterthought and no more than a disguise for the real motive, which was to exploit a condition of surplus labor. Happily, the cynic would be wrong. The progressive policies early adopted by the mill management put the lie to any such argument. Actually, the founders were pious men. The Schoolfields were sons of a Methodist Minister. R. A. Schoolfield throughout his life was a highly religious person, a lay leader in his church, and a liberal contributor to it. James E. Schoolfield, sometime after the founding of The Riverside Cotton Mills, became interested in a revival movement, was well known as a lay preacher throughout the State, and ultimately was largely occupied in evangelical work. The founders were men of Christian purpose whose devotion to the Christian ethic provided the hard core for company policy the central theme of which was integrity.

On July 27, 1882, the Circuit Court of Danville issued its order granting corporate status to The Riverside Cotton Mills, and with initial capital of \$75,000, the company was in business. For decades thereafter, The Riverside Cotton Mills was extraordinarily successful, though it commenced, as its founders confessed, with "limited means, no trade, and no experience in the business by any of its promoters."



John Henry, Cardinal Newman, once said: "Growth is the only evidence of life." If this be true, then Dan River from its earliest days was vital and pulsating with life. Its growth was phenomenal. In 1883, when the first mill was completed there were 2,240 spindles in place and 100 looms. By 1956, in the Danville plants to which physical growth had been confined up to that time, there were more than 450,000 spindles and 9,000 looms. The work force had increased from about 100 in 1883 to more than 10,500 in 1956. Payroll in 1884, the earliest year for which records exist, totalled \$36,922 for the year. By 1956, this had multiplied to more than \$30,000,000 on an annual basis.



In 1956, an entirely new chapter was written in the company's history with the acquisition of all the stock of Iselin-Jefferson Company, Inc., and the assets of Alabama Mills, Inc. As a result of these transactions, Dan River joined forces with one of the leading textile commission houses, its wholly-owned factoring subsidiary Iselin-Jefferson Financial Company, Inc., and its manufacturing subsidiary, Woodside Mills. With the acquisitions Dan River's physical facilities were virtually doubled.



As in the lives of men, so in the lives of companies, growth and progress are frequently not a steady process of moving from triumph to triumph. Sometimes there is a spurt ahead, then a pause to regroup forces and consolidate the gains made; occasionally there may be setbacks from which recovery comes slowly after much travail. Such has been the course of Dan River.

The years from 1882 through the following four decades were, until last year, the era of Dan River's remarkable physical expansion. During this era, the bricks of one building were barely in place and the mortar set before another building was off the drawing boards and under construction. By 1895, The Riverside Cotton Mills were reported to be operating 15,000 more spindles than any other mill in the South. By the turn of the Century The Riverside Cotton Mills, lying astride the Dan River on both the North and South banks, was largely built in terms of plant construction. At Riverside, the only major addition since 1900 was completed in 1920 and it is the largest plant in what is now referred to as the Riverside Division.



Meanwhile, important developments were under way bearing on a site several miles upriver from The Riverside Cotton Mills. A persistent and irritating problem at Riverside had been lack of adequate power, and with the rapid increase in power requirements accompanying the growth in plants and productive machinery, it seemed obvious that new power sources must be found. A survey indicated a dam could be built at the upriver site, so Thomas B. Fitzgerald, President of The Riverside Cotton Mills, worked out a plan for incorporating The Dan River Power & Manufacturing Company, and took the lead in obtaining a corporate charter in July, 1895. The charter was extremely broad, authorizing the building of dams and development of water power; erection and operation of factories to manufacture cotton, woolen, wooden, iron, and other ware; the generation, transmission, and sale of electricity, and almost anything else that might conceivably be linked with the development of water power.



Among original subscribers to the stock of the new corporation were most of the founders of The Riverside Cotton Mills. With subscriptions for the stock of the new company lagging, Fitzgerald urged, with the strong agreement of R. A. Schoolfield, then general manager and secretary and treasurer, that Riverside become the dominant stockholder in the new enterprise. This

plan came to fruition, and from that time until the merger of the two companies in 1909, the officers and directors of Riverside were the officers and directors of The Dan River Power & Manufacturing Company.



For several years after the formation of the new company, nothing much happened and no dam was built. Activity was further delayed after 1900 when a certain amount of sparring ensued between officers of the company and officials of the city as to whether the contemplated dam, and the mills to be built at the upriver location, would cause pollution in the river and affect the city's water supply. When the debate of horsepower *versus* bacteria count was amicably resolved, construction of the dam and Dan River Power & Manufacturing Company Mill #1 got under way in earnest. The first carding in Mill #1 was done on Thanksgiving Day, 1904. Once again, as had been the case at Riverside, the construction of mills and the installation of machinery were outpaced by demand for the company's cloth. Mill #2 was started in the Summer of 1905, the facilities to include a bleachery to answer the demand for wide, bleached sheeting, and to brighten the colors in the company's traditional colored fabrics. Mills #3 and #4 followed in rapid succession, but it was not until 1922 that Mill #5, the huge finishing plant, was constructed.



In 1909, with the merger of the two companies, the corporate name became The Riverside & Dan River Cotton Mills, Incorporated, a name continued until 1946, when it was simplified to Dan River Mills, Incorporated.



For the decade after 1909, the company grew steadily in sales and in the value of its assets. Even taking into account the inflated values of the First World War years, the decade stands out as one of the most flourishing periods in the company's history.

What of the men who guided The Riverside Cotton Mills, The Dan River Power & Manufacturing Company as well, and finally the merged organization, through this era of remarkable growth? There were two: Thomas B. Fitzgerald and Robert Addison Schoolfield, who were the driving forces, and who furnished all but a small part of the energy, enthusiasm, and skill that brought the company its early success.



Fitzgerald was the builder in its most literal sense. Building was his business, the putting together of bricks and mortar, and it was a work he did well. The monuments to his ability stand today on the banks of the Dan River. He was also a man of vision. The evidence of this is in his leadership of the venture to establish The Dan River Power & Manufacturing Company. For many years, his only remuneration was the modest fee he derived from directing the construction of various plants. When he did receive compensation as a paid officer of the company, his salary was little more than a token when compared with his services. Long after his retirement as President, and until his death, he served faithfully on the board of directors. His contribution was great.



Even greater was the contribution of Robert Addison Schoolfield. From the day the company was founded until he relinquished the presidency in 1918, a span of 36 years, he managed the company's affairs. Whether he had the title or not—and he did not become President until 1904—he was chief executive officer responsible for manufacturing and sales, and for all the related activities except real estate and construction, which were T. B. Fitzgerald's special province.



Schoolfield was tough-minded, a frugal man in business, with a rare ability to get full value for a dollar spent. He was a demanding superior, a shrewd merchant, a sharp trader, a skilled cotton buyer, a brilliant manufacturing man. He believed in and lived by the old-fashioned virtues. He had no truck with dancing,

card playing, or carousing. He counted sobriety among the cardinal virtues both from economic and from religious considerations.



He was also a gentleman, and a man who gave of himself and his substance for the causes in which he believed. He was a man to respect.



With the close of the era of great physical expansion, Dan River entered a new period, one marked by a development rare in corporate annals, and perhaps unprecedented in a major corporation. This was the era of Industrial Democracy, which opened in 1919 on a note of high hope and closed in 1930 as depression stalked the land.



Harrison B. Fitzgerald, the son of T. B. Fitzgerald, was elected President in 1918, succeeding R. A. Schoolfield. For many years, he had been Schoolfield's trusted assistant. The two men were poles apart in their personalities, despite their close association and great respect for each other. The younger Fitzgerald was a dynamic personality, an outgoing person, a man people loved. He was known to thousands in the mills; he was their friend. He was generous to a fault. He too was religious, a leader in his church and a man of spiritual inspiration. As President, Fitzgerald kept a close watch on the sales operation, handled the financing, and supervised the cotton buying, but his great and abiding interest was the people who worked for him, and because of that interest, he single-handedly introduced Industrial Democracy to Dan River.



The plan of Industrial Democracy provided for a Cabinet composed of company officers, a non-elective Senate made up of supervisory personnel, and a House of Representatives elected by the workers in the ratio of one representative for each 40 workers. This system of government was to enable the workers to express themselves on matters affecting their well-being and the

welfare of the company, thereby bringing management and labor together in one harmonious body.



It could not last. Initially, it was greeted with great enthusiasm, and heralded throughout the land with such banner headlines as "Employees Take Charge of Great Cotton Factory and Run It Just as the United States is Governed by President and Congress." They did not take charge, although there is no doubt that legislation introduced in the House of Representatives by worker members did much to remove petty grievances and sources of friction that might have mushroomed into serious problems. Ultimately, under the pressure of adverse conditions, the management found it necessary, in order to protect the business, to veto the desires of employees expressed in legislation. When this occurred, its usefulness came to an end, and Industrial Democracy died.



It was a great and noble experiment, a remarkable chapter in the company's history. It was the perfect symbol of an era that began on a note of hope and optimism for the future, but ended on a note of discouragement.



The "thirties" for Dan River, as for other textile companies and most other businesses, was a time of struggle to find markets, to cut costs, to eke out profits, to stay alive, and to be ready for another, more prosperous day.



It was a time that had to be faced without the guiding hands of the three men who up to that time had directed Dan River's destiny. Thomas B. Fitzgerald died in 1929, his son Harrison died early in 1931, and R. A. Schoolfield died late in the same year.



There was no physical expansion during this period. There were modest improvements in machinery and equipment, but

progress even in this direction was sharply limited by the lack of available funds. Time and again, the company changed fabrics in the search for something that would sell as the markets for its traditional constructions dried up.



It might be noted here that throughout Dan River's history, there has been a steady trend toward finer, fancier fabrics to meet changing consumer tastes. The first products were coarse colored goods, primarily plaids, and unbleached sheeting. Later, production was started on chambrays, bleached sheeting and finished sheets. With the introduction of gingham, in 1911, the movement toward finer goods was intensified.



During the 1920's, and in the 'thirties as well, the company shifted fabrics frequently to capitalize on fleeting markets, but the large volume was still in gingham, chambrays, and sheeting. In the 'forties, excluding the war years when heavier fabrics to meet U.S. Government requirements represented a substantial part of Dan River's production, there was a rapid move toward fancy dress goods, shirtings, and sportswear. Since then, with greater combing capacity, and increased yarn-dyeing facilities, the trend toward finer, fancier, higher-quality fabrics has continued. Consumer tastes have changed in 75 years. They have been upgraded as increased incomes have permitted a higher standard of living. Dan River fabrics have faithfully mirrored this desire for something better, something finer, something more stylish. This is now more true than ever before.



In 1940, George S. Harris was elected President. Harris was an experienced textile mill executive, a man known and respected throughout the textile industry. He came to Dan River with definite ideas as to what had to be done, and with the knowledge to go about getting it done. He remained chief executive officer until 1949, when poor health forced him to relinquish active control.

Harris inaugurated what has been termed the era of modern management. During his tenure as President and up to 1956, there was comparatively little physical expansion. Rather, this was a period for re-grouping forces, for re-defining objectives, as the course for the future was charted, and most immediately pressing, for modernizing machinery and equipment following the depressed years of the 'thirties. The course he charted was sound, and his accomplishment was great. By the time he was no longer able to carry the load, Dan River had assumed a new status in the textile industry, and was gathering strength for the tremendous expansion to come with the major acquisitions of 1956.



Time does not permit review of all the important changes initiated under his administration, but I should like to comment on two basic policies to give an insight into Dan River's success in this modern era:



First, research and development. Not so many years ago, cotton fabrics were on the downgrade; the glamour of the synthetics was beginning to claim the affection of the consuming public. Something was needed to revive cotton's appeal; the answer was research. Dan River was among the first to realize this, and among the first to establish extensive laboratory facilities for research on textile dyes, chemicals, and finishes.



The researchers have worked a miracle in the application of chemicals to cotton. They have created cottons that shed wrinkles, and now cottons that snap back into shape after washing, and without ironing. They have done this, and retained all the wonderful freshness, crispness, and coolness that for thousands of years have made cotton the favorite fabric.



With these developments, there has been a resurgence in cotton for apparel in recent years. A large share of the credit must go to the chemists in the laboratory. Among the cotton textile manu-

facturers, I think it is fair to state that no company has worked more diligently, promoted its developments more vigorously, and contributed more to cotton's new appeal than Dan River. Our strong support of research continues.



Second, advertising and promotion. An oft-repeated maxim in the textile industry is that consumer advertising is not effective because textile products lose their identity before they reach the hands of the ultimate buyer. We do not agree, and we base our opinion on experience.



Twenty-odd years ago, Dan River's advertising consisted of a simple announcement occasionally placed in one of the trade papers stating that the company was in business and sold certain enumerated products. Just prior to 1940, there were a few halting steps in the direction of an advertising campaign. Under Harris, a more aggressive program was launched, and consumer advertising became a fundamental part of Dan River's merchandising policy, and it so remains today.



The Dan River name has a clear meaning to most housewives. They associate it with colorful fabrics of high quality that have a remarkable ability to retain their original appearance after repeated use and repeated washings. This has not come about by chance. It has been won by consistent consumer advertising over a period of sixteen years, backed by fabrics whose performance is equal to the claims made for them.



Dan River throughout its history has perhaps been unique in one respect—its concentration on yarn-dyed fabrics with the pattern woven into the cloth. Other great cotton textile producers have looked more to the staple fabrics—print cloths, broadcloths, denims, and the like—and, at least until very recent years, placed the main emphasis on grey rather than finished cloth. True, our company manufactures staples, but in general, its well-being at

any given time has been determined by the status of its fancy, colored goods operation. In Danville we now produce a multitude of combed, fancy, colored cotton fabrics in a broad range of constructions that is probably not matched by any company in the world.



But, as there is strength in specialization, there is also weakness. Style in fabrics is a fickle, changeable mistress whose gyrations are difficult to predict. There have been occasions in the past when Dan River has been hurt by a swing in consumer tastes to styles to which the company could not quickly and efficiently adapt. This problem lay at the heart of the management's decision to diversify its production facilities, and more than any single factor determined our expansion in 1956. With our Alabama Mills Division and with Woodside Mills, Dan River has become an important producer of print cloths, industrial fabrics, and heavy cotton goods such as corduroys, denims, gabardines, and decorative fabrics. Today, we are big manufacturers of grey goods as well as finished cloth. With this diversification, we believe that Dan River in the future will exercise far greater flexibility in meeting shifts in consumer demand, and will better be able to utilize its equipment and manpower to best advantage.



These have been 75 exciting years! You have heard only segments of the story, for the full telling would require volumes that may never be written. We have had our full share of triumph and tribulation, of glory and despair, of friendship and strife; yes, of fun and sadness. We would not have it otherwise, for these are but the normal ingredients of life, human or corporate. We would only ask that in our stewardship of this great enterprise in the years ahead, we might earn from future generations a measure of the high esteem in which we hold our founders.

THE END



"Actorum Memores simul affectamus Agenda!"



THIS NEWCOMEN ADDRESS, *dealing with the history of DAN RIVER MILLS in Virginia and marking their 75TH ANNIVERSARY (1882-1957), was delivered at a National Newcomen Dinner of The Newcomen Society in North America, held at New York, N.Y., U.S.A., on October 31, 1957. MR. ERWIN, the guest of honor, was introduced by FLOYD W. JEFFERSON, Chairman of the Board, Iselin-Jefferson Company, Inc.; Member of the New York Committee, in American Newcomen. The dinner was presided over by the SENIOR VICE-PRESIDENT FOR NORTH AMERICA, in this international Society.*





“It is at once the special privilege and the great opportunity of this Society to chronicle the achievements of men worthy of esteem in the world of business and industry, and the history of the institutions they have built. As a diligent reader of the Society’s proceedings, I am secure in the knowledge that the task is being done well indeed.

“This is the 75th Year since the founding of Dan River Mills. It is a year in which many honors have been bestowed upon our company, but among them, none is greater than this opportunity to have its history placed in the archives of this Society.”

—WILLIAM J. ERWIN





“These have been 75 exciting years! We have had our full share of triumph and tribulation, of glory and despair, of friendship and strife; yes, of fun and sadness. We would not have it otherwise, for these are but the normal ingredients of life, human or corporate. We would only ask that in our stewardship of this great enterprise in the years ahead, we might earn from future generations a measure of the high esteem in which we hold our founders.”

—WILLIAM J. ERWIN





COTTON TEXTILES, *from earliest times, have added utility and beauty to Man's Civilization. Cotton, in its agricultural production and in its industrial fabrication, going back to handicrafts in America's colonial homes, has contributed both to the Material Progress and the Economic Advance of our Nation. In the pages you have read is the colorful, dramatic, and consistently human life-story of a pioneer and leading organization in the Commonwealth of Virginia, whose contributions have been outstanding in the Textile*

Industry!



Four Young Men Go In Search Of A Profit!

The Story of Kimberly-Clark Corporation (1872-1957)

JOHN R. KIMBERLY



587

1957



"Were American Newcomen to do naught else, our work is well done if we succeed in sharing with America a strengthened inspiration to continue the struggle towards a nobler Civilization—through wider knowledge and understanding of the hopes, ambitions, and deeds of leaders in the past who have upheld Civilization's material progress. As we look backward, let us look forward."

—CHARLES PENROSE

*Senior Vice-President for North America
The Newcomen Society of England*



This statement, crystallizing a broad purpose of the society, was first read at the Newcomen Meeting at New York World's Fair on August 5, 1939, when American Newcomen were guests of The British Government

"Actorum Memores simul affectamus Agenda"

FOUR YOUNG MEN GO IN SEARCH OF A PROFIT

The Story of Kimberly-Clark Corporation
(1872-1957)

An Address at New York



AMERICAN NEWCOMEN, *through the years, has honored numerous corporate enterprises and along many avenues of human effort, both in the United States of America and in Canada. Such a Newcomen manuscript is this, dealing with the history of an internationally-known organization in the Paper Industry, and with the lives and work and contributions of those who founded and those who have carried forward a distinguished enterprise!*





“Eighty-five years ago, four young men of Neenah, Wisconsin invested \$7,500 apiece in a local venture for which they foresaw great possibilities.

“The four were York Staters and New England Yankees by birth and early training. Their names were John A. Kimberly (my Grandfather), Charles B. Clark, Frank C. Shattuck, and Havilah Babcock. Their ages ranged between 28 and 35.

“The industry in which they ventured their \$30,000 was the manufacture of paper which, in 1782, was limited as to products and production.”

—JOHN R. KIMBERLY



Four Young Men Go In Search Of A Profit!

The Story of Kimberly-Clark Corporation (1872-1957)

JOHN R. KIMBERLY

MEMBER OF THE NEWCOMEN SOCIETY
PRESIDENT AND CHAIRMAN OF THE BOARD
KIMBERLY-CLARK CORPORATION

NEENAH
WISCONSIN



THE NEWCOMEN SOCIETY IN NORTH AMERICA
NEW YORK SAN FRANCISCO MONTREAL

1957

Copyright, 1957
JOHN R. KIMBERLY



*Permission to abstract is granted
provided proper credit is allowed*



*The Newcomen Society, as a body,
is not responsible for opinions
expressed in the following pages*



*First Printing: November 1957
Second Printing: November 1957*



*This Newcomen Address, dealing with the
history of Kimberly-Clark Corporation, was
delivered at a National Newcomen Dinner
of The Newcomen Society in North America,
held in Ballroom of The Pierre, at New
York, N.Y., U.S.A., when Mr. Kimberly
was the guest of honor, on
November 6, 1957*



SET UP, PRINTED AND BOUND IN THE UNITED STATES
OF AMERICA FOR THE NEWCOMEN PUBLICATIONS IN
NORTH AMERICA BY PRINCETON UNIVERSITY PRESS





INTRODUCTION OF MR. KIMBERLY, AT NEW YORK ON NOVEMBER 6, 1957, BY EDMUND FITZGERALD, PRESIDENT, THE NORTHWESTERN MUTUAL LIFE INSURANCE COMPANY, MILWAUKEE; VICE-CHAIRMAN OF THE WISCONSIN COMMITTEE, IN THE NEWCOMEN SOCIETY IN NORTH AMERICA.

My fellow members of Newcomen:

My pleasant opportunity is to introduce a fellow resident of Wisconsin and a business and personal friend.

Named for his great-grandfather, a merchant who moved from New York State to Wisconsin 110 years ago, our guest of honor is a member of the third generation of his family to be active in the management and leadership of his company.

A graduate of Phillips Andover Academy and of the Massachusetts Institute of Technology, his entire business career has been spent with Kimberly-Clark. He was elected President of that company in August of 1953, and added the responsibilities of Chairman of the Board in July 1955.



In his rise, he participated in every phase of the Company's operations and planning, and worked closely with his forward-looking predecessors:—his father, James C. Kimberly; F. J. Sensenbrenner; Ernst Mahler; and Cola G. Parker—a group of leaders unexcelled in the history of our State of Wisconsin.

His war service was in the Office of Production Management and in the War Production Board of which he was serving as Assistant Director General at the time he returned to Neenah in 1943.



He has given freely of his energy and leadership to his own industry, to banks and corporations as a Director, and to the public good. In the latter category, he is a Trustee of the Rockefeller Foundation, Lawrence College, and the Episcopal Church Foundation.



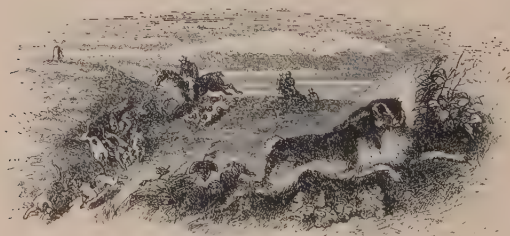
He is equally at home on water or land, for he is a skilled yachtsman and he operates successfully a North Carolina farm, where he raises cotton, general farm products, and dairy cattle.



Finally, he is a happy father and husband, and one of the most delightful of companions.



Gentlemen: JOHN R. KIMBERLY.





My fellow members of Newcomen:

EIGHTY-FIVE YEARS ago, four young men of Neenah, Wisconsin invested \$7,500 apiece in a local venture for which they foresaw great possibilities.



The four were York Staters and New England Yankees by birth and early training. Their names were John A. Kimberly (my Grandfather), Charles B. Clark, Frank C. Shattuck, and Havilah Babcock. Their ages ranged between 28 and 35.



The industry in which they ventured their \$30,000 was the manufacture of paper which, in 1872, was limited as to products and production.



Aside from a few specialties like wall paper, the big demand for paper was for printing, writing, and wrapping. Writing and printing papers were made from linen and cotton rags; wrapping paper from straw or old burlap sacking.

The four young merchants of Neenah had carefully evaluated their chances of success. They knew the nearest important mill source of good newsprint was 300 miles to the east of Wisconsin and the freight rates were high in relation to the *F.O.B.* factory price of the product.



They knew also that the West was opening up, that new cities, towns, and hamlets were growing like mushrooms, and that the greater the westward expansion, the higher would be the transportation costs on all types of eastern products.



The War Between the States was still a recent memory and the Union Pacific Railway, linked with the West in 1869, was urging settlers to locate near its right-of-way. The Santa Fe was racing against time to complete its trackage to the Colorado line, with 3-million land-grant-acres as the prize.



Growth, and restlessness over high distribution costs, went hand in hand in the area to the west of the Great Lakes. A significant sign of the times was the founding in Chicago by cost-cutting Aaron Montgomery Ward of the mail order business that bears his name today.



It was, therefore, the intelligent reasoning of the four young men of Neenah that the growing number of midwestern publishers would be interested in a paper supply based on near-at-hand freight charges, and they organized the partnership of Kimberly, Clark and Company with that in view.



They chose their home town as the location for their first paper mill, because the community was blessed with an abundance of water—primarily, at that time, for power purposes. The water supply was the Fox River which, in 40 miles, drops about as far as the height of Niagara Falls. The reliability of its flow—the

power it generated—had made Neenah a flour milling center in the days before the Civil War.



All of these considerations were in the minds of the partners as they debated the soundness of their project. By today's standards, \$7,500 per man was not a lot of money. It was to them. Was their reasoning sound?



For the fiscal year ended April 30, 1957, Kimberly-Clark Corporation, present-day successor to that early venture, reported net sales of \$310,733,968 and net income of \$24,820,590 after taxes.



Corporate properties were valued at \$130,971,252 after reserves of \$96,667,700. In addition, a total of over \$26 million in new construction was in progress. Its output was no longer limited to printing papers. Its consumer products were in use in millions of homes here and Abroad. Kleenex tissues, Kotex sanitary napkins, Delsey bathroom tissue—all had become familiar and valued household names. But its products were not only around the home. They were in industry—for protective packaging, for industrial wipers, for other specialty uses. They were in beauty and barber shops, in the medical field, in stores—and they were being made around the world.



But, in 1872, the four young men of Neenah could not foresee, even in their fondest dreams of success, such a future for their business. The core of their thinking was *paper*—printing paper—and their early plans were built around this single product.



By the terms of the partnership agreement, Kimberly and Clark were chosen as the active managers of the new enterprise. Shattuck and Babcock concentrated on merchandising and milling. My Grandfather and Mr. Clark lost no time in setting off for

Connecticut where they arranged for the delivery of a 72-inch paper machine and the necessary auxiliary equipment.



The times considered, the machine was the latest in modern design. It ran at fifty feet a minute and on a good day would turn out two tons of all-rag newsprint.



(By comparison, a modern machine produces newsprint 310 inches wide at 2,000 feet a minute or 350 tons a day. Our modern machines are as long as a city block, three stories high, and cost around \$12 million. Their appetites are voracious, consuming some 18,000 gallons of liquid pulp a minute and producing a 13-ton roll of paper in less than one hour's time.)



That first machine was ready for delivery in October 1872.



From the outset, the two managing partners split their duties according to their particular talents. Clark was outstandingly energetic and forceful, and a natural leader. He took charge of the paper mill and related activities. The men under him rated him hard but just, and definitely their advocate.



Their regard for him was shown in the late 1880's when he was elected to the U.S. Congress, largely by the labor vote. He died 35 years before I joined the business, so I knew him only by reputation.



By natural bent and experience, Kimberly was a merchant. Although only 34, he had the background necessary to supervise both the financial operations and the sales of the new business.



It was logical, therefore, that when the business of the original partnership was incorporated, in 1880, J. A. Kimberly was chosen

its first President. He held that office until 1928, when he died at the age of 90.



By today's standards, both Kimberly and Clark worked man-killing hours at a man-killing pace in the early days of their business.



The modern idea of an 8-hour working day would have startled them into disbelief!



For example, there was the problem of personal transportation. Today, many of our people at Kimberly-Clark live in Appleton, Wisconsin, seven miles from Neenah, and are at their desks only a few minutes after leaving their homes.



Kimberly and Clark, on the other hand, started work at 7 o'clock each morning in the original mill at Neenah, dealing with inbound mail—and orders, presumably—plus recent operating problems. At 8 o'clock, they left by carriage or sleigh for Appleton, where they had taken over the management of a larger mill.



Noontime saw them on their way back to Neenah where, after a late noon "dinner"—luncheon was for sissies in those days—they worked all afternoon in the office, before going home for a 6 o'clock supper.



After supper they generally returned to the office with their clerks for several hours' work, lining things up for the next day.



The problem of the trip to Appleton each day was simplified somewhat in the 1880's, when the Milwaukee Road added an 8:30 morning freight train that ran non-stop to Appleton. Thereafter, the partners rode in style—in the caboose!

This daily working schedule was maintained for years. It was broken in 1891 by the death of Mr. Clark, but my Grandfather continued to thrive on overwork. So did the business.



The first office was in a frame shanty and could seat only the two partners and a messenger boy. But, in 1880, when William Jennings Bryan of Free Silver fame was still an undergraduate student in Illinois, Kimberly and Clark splurged into a two-story brick building that looked very much like a four-room school house.



This modest structure, with frequent additions as the business grew, served its original purpose until 1956. Then sheer necessity of size forced the erection of a new office building on another site by the side of little Lake Butte des Morts, at Neenah.



From the outset, expansion was very much the goal of that original partnership—a policy that has been maintained down to the present day.



In the first two years, despite the Panic of 1873, the infant company made enough money to buy out the only other local paper mill.



In another few years, it installed a 3-machine mill at the Appleton Plant to manufacture manila wrapping paper from jute butts and ground wood pulp.



During these formative years, certain major operating and management policies developed.



All available earnings were ploughed back into the business.

Emphasis was placed upon teamwork, rather than brilliance of individual performance. Over those early years, the company became a team of individuals with management strength in depth.



Four principles adopted by the original four partners still govern the company. These are:

- (1): Manufacture the best possible product.
- (2): Serve customers well and deal fairly to gain their confidence and good will.
- (3): Deal fairly with employees.
- (4): Expand capacity as demand for product justifies.



The Year 1880 was one of substantial prosperity that was supported by a demand from Europe for American foodstuffs at almost any price. The feeling of optimism was greatest in the Middle West and the partners deemed the time opportune for a change in capital structure.



Kimberly & Clark Company was incorporated as a successor to the original venture. The books of account listed \$400,000 in capital account and physical assets that included the two mills in Neenah, a flour mill in Appleton that had been purchased because of its waterpower rights, and an assortment of other water power rights.



Unwittingly the new corporation was to benefit by a restriction imposed by the geography into which it was born. Until steam and electricity came along, the ceiling on paper production at Neenah was the amount of water power available.



Thus when the technology of those days developed a better process or larger capacity paper making machines the most profitable course open to Kimberly & Clark Company was to scrap the

old and install the new. Thereby, more earned dollars per horsepower were obtained.



Thus the pattern set by the limitations of the Fox River water supply became company policy in later years. Management recognized obsolescence as a thing to be avoided.



The Panic of 1893 hit the Middle West and West particularly hard. Farmers suffered more than any other class because of the slump in agricultural prices. Unemployment increased and unrest was intensified by the strike of Pullman Company workers.



W. H. Harvey, plausible demagogue on the problems of the era, summarized conditions in this manner in his *Coin's Financial School*:



"Hard Times are with us; the Country is distracted; very few things are marketable at a price above production; tens of thousands are out of employment; . . . the gold reserve at Washington is sinking; . . . taxes have assumed the importance of a mortgage; . . . hungered and half-starved men are banding into armies and marching toward Washington; the cry of distress is heard on every hand; business is paralyzed."



Nevertheless the surviving three partners, Kimberly, Shattuck, and Babcock pushed courageously ahead with their expansion plans for Kimberly & Clark.



With the Nation in the backwash of the 1893 Panic, corporation management generally was inclined to sit tight and avoid venture-some expansion.



But the senior and junior executives of the Kimberly & Clark management team had other ideas. For several years they had

been scanning the timber-rich North Woods for a prime site for expansion. They found it at the great cataract of Quinnesec, on the Menominee River.



They began dickering in 1897 for the small paper mill there and closed the deal on a sub-zero day, in February 1898. The contract was signed by a bob-sled load of Neenah executives who drove down over the frozen river from the nearest railroad station.



They put a manager in charge, but this new site had not been purchased to perpetuate a one-machine operation. That same afternoon they drove back to town and began making plans for a new Quinnesec mill.



Within a few months, the company tore down the old mill and renamed the town Niagara. A major construction job was rushed to completion.



Early in 1901, the Niagara mill began making pulp and manila wrapping paper on two machines which were at that time the largest and fastest in the Country. The mill's capacity was one-third greater than that of the Kimberly mill, previously the company's pride and joy.



Then came a catastrophe which tested the caliber of Kimberly & Clark leadership.



Fire wiped out the Kimberly mill and its newsprint capacity so vital to the contracts held by the company.



The emergency called for speedy action. Rush orders went out to machinery builders for parts to convert Niagara's brand new machine from wrapping paper to newsprint.

Machinists and millwrights were called in from every Kimberly & Clark property. So rapidly did they shift facilities and remodel equipment that the Niagara mill shipped its first carload of newsprint just four weeks after the Kimberly fire. We believe that changeover set a world's record that stands today!



While paper making machines were soaring in size, other changes were occurring in the industry. In 1872, the chief sources of supply for paper mills were rags, straw, and jute.



In the '80's, wood pulp moved to the fore as an important source of fiber and, in the '90's, the realization grew that future expansion must be tied in closely with an assured access to this type of raw material.



In 1902, when Kimberly-Clark made its first timberland purchase, Free Silver and William Jennings Bryan had been disposed of as political issues and William McKinley had started his second term as President. A dynamic young man named Theodore Roosevelt was serving as Vice-President.



That first acreage was followed by substantial purchases in Michigan and Minnesota in the next several years, and there have been many others since.



These, however, were only the prelude to a major move into Ontario, Canada, necessitated by expansion at Niagara Falls, New York.



As the company got into the tree business to assure supplies for its paper business, it became clear that a professional forestry staff was necessary to manage these valuable holdings.

Today, we have a corps of 125 professional foresters who conduct the operations and actively supervise the wood harvest.



These foresters are the only people in Kimberly-Clark who are *not* paid to get something finished in a hurry. Their basic purpose is to see that acreage cropped this coming Winter shall be ready with another harvest of pulpwood in 2057 A.D. (Foresters of impatient disposition can request assignment to our Southern operations where the tree-crop cycle is a mere 25 years.)



To give you some idea of the magnitude of our forestry operations, we planted some 20 million trees in the last two years to supplement the natural regrowth on our cutover lands. We own or control about 10 million acres of forest land here and in Canada. Our 1957 pulpwood requirements will be in excess of 1.1 million cords.



Prior to 1910 or thereabouts, the paper industry—and Kimberly-Clark—concentrated its development activities on improving the output of those old standbys—newsprint, writing paper, and wrapping paper.



But with the growth of the industry, new specialties appeared that began to outrun the knowledge and capabilities of the early mill managers. Development of these specialties was to have a profound effect on the future history of the company. We found that in Europe, paper makers already had realized that pulp and paper making was essentially a chemical process.



Quite early in this twilight of the feel-and-smell era of quality control, Kimberly-Clark began to employ a group of technical control men.



One of the first results of their labors was the erection of an electrolytic chlorine and caustic plant at Kimberly, Wisconsin, in 1913.

The chlorine and caustic plant was followed by a laboratory to control processes in the paper mill. But real progress came in 1914, when we went overseas to draw on the European experience for guidance.



We were able to identify two important new product ideas taking shape on the Continent and to use them as a point of departure for our own operations.



One was a greatly improved groundwood printing paper, and the other a new type of material called creped wadding. Both had a tremendous influence on the growth of Kimberly-Clark in the years that followed.



When you read your favorite magazine tomorrow night, consider that each sheet of paper has a base of tiny fibers which once were combined with other elements, to form a tree in a North American forest.



Consider, too, that each sheet contains materials from the soil of seventeen or more States; that its production was made possible because of copper from Montana and Chile; because of glues, dyes, sulphur, alum, starch.



That piece of paper represents the ingenuity of many men, including those of our company. You may be interested to know that it was Kimberly-Clark men who produced America's first roto-gravure paper. For many years after 1915, practically all the rotogravure printing in the United States of America was on refined groundwood bookpaper from Kimberly-Clark mills. Our company's history in printing paper spans the development of modern printing and advertising in America.



I dwell on this because printing paper is a major corporation product, though perhaps not as spectacular as other corporate products.

The story of creped wadding is equally remarkable.



Out of the first experiments, Kimberly-Clark technicians developed Cellucotton—a fluffy, absorbent material which proved to be superior to absorbent cotton for surgical dressings.



During the First World War, the output of Cellucotton went exclusively to the military. After the Armistice in 1918, Kimberly-Clark repurchased the war surplus stocks of the product and faced the need to move them.



The Kotex sanitary napkin was the first wadding product trademarked and marketed for retail sale to consumers. By 1920 standards, however, it was a little too daring a product for a conservative old line paper manufacturer. Therefore, a sales company was formed to merchandise it, with Kimberly-Clark as the sole source of wadding.



Kotex was followed in 1924 by *Kleenex* tissues, another Cellucotton product.



Kleenex tissue was first marketed as a substitute for the “unsightly cold cream towel” so prevalent in the bathrooms of the 1920’s. The product sought feminine approval as a “sanitary cold cream remover.”



But in three years, the makers of the “cold cream remover” found another use and tested its appeal as an absorbent ‘kerchief which could do double duty *in case of a cold*.



In 1929, the product was given another description—Kleenex Cleansing Tissues—and in 1930, Peoria, Illinois, became the scene of a marketing test to decide whether the best sales appeal

for the product was as a cold cream remover or as a disposable handkerchief in time of colds.



In 1931, Kleenex Cleansing Tissues became Kleenex Disposable Tissues, useful alike for colds, facial cleansing, and for a hundred other purposes. A heavy advertising campaign made it known to millions. Sales are still soaring.



Other newer Cellucotton products include: Kleenex table napkins, Kleenex towels, Delsey bathroom tissues, and those sanitary neck strips called Sanek used in so many barber shops.



Now let me tell you briefly of the corporate changes that accompanied this growth in sales and in new products.



As a result of the death of three of the original partners, 75 percent of the stock of Kimberly and Clark Company was held in 1905 by three estates.



The situation was complicated further by management's policy of rewarding competent executives with minority shareholder interests in some of the subsidiary and affiliated companies.



In 1906, Kimberly-Clark Company was incorporated for \$2 million, primarily to get the assorted properties into one manageable basket. Seven men owned all the stock. They were J. A. Kimberly, sole survivor of the original partners, three sons of founders, and three up-and-coming executives. This corporate structure continued until after my Grandfather's death in 1928.



By that time, it had become fully apparent that the changed circumstances wrought by inheritance tax laws, the demands for

working capital to develop new products, and the need for expansion of existing facilities made a change from the status of a close corporation advisable.



So a newly incorporated Kimberly-Clark Corporation, capitalized at \$30 million, offered a substantial block of its stock to the public and listed it on the principal exchanges.



In the 29 years since that first public offering, the company has continued to grow until, today, one or another of its diverse family of products is used in homes and industries every hour of every day.



The company operates 20 plants in the United States, four in Canada, one in Mexico, and five Overseas, plus five nurseries.



United States operations are located at Coosa Pines, Alabama; Fullerton, California; New Milford, Connecticut; Lee, Massachusetts; Marenisco and Munising, Michigan; Breckenridge and Windom, Minnesota; Elizabeth, Jersey City and Spotswood, New Jersey; Ancram and Niagara Falls, New York; Balfour, North Carolina; Mt. Holly Springs, Pennsylvania; Memphis, Tennessee; and Appleton, Kimberly, Niagara, and Neenah, Wisconsin.



Canadian plants are at Winnipeg, Manitoba; and Kapuskasing, Niagara Falls, and Terrace Bay, Ontario.



Overseas plants are in Sydney, Australia; Larkfield, England; Quimperlé, France; Stockstadt, Germany; and Johannesburg, South Africa.



And our products: The list may seem long, but it is important for a true picture of our operations.

Consumer products are best known. They include: Kleenex facial tissues, table napkins, and towels; Kotex sanitary napkins; Delsey bathroom tissue; and Marvalon shelf and drawer lining.



Our industrial and specialty products are even more diverse, serving a wide variety of fields.



For example: we also make Bible papers, blueprint papers, business papers, carbonizing papers, cigarette papers, and electrical condenser papers.



We make coated and uncoated book papers for commercial printing and periodical publishing. We make cohesive coated papers, converting papers, filter papers and filter wadding, and papers for food packaging.

Our industrial products include surgical gauze, protective packaging, industrial wipers, lumber, Mat Pak stereotype backing, meat and poultry pads, newsprint, non-woven fabric, plastic impregnated papers, pulp, Sanek ear pads, neck strips and towels used in barber and beauty shops, saturated and saturating papers and wax stock.



While we at Kimberly-Clark are naturally proud of our record, I would be remiss if I did not remind you that our march forward in growth and accomplishment has been accompanied over the years by a remarkable growth and contribution by the Paper Industry as a whole.



Just as our success, as a company, was and is a team effort, so has the growth of the entire Paper Industry been a joint effort in which we have been privileged to play a leading role.



In 1869, three years before the founders of our company ventured their \$30,000, the paper industry employed 18,021 wage

earners and paid them \$7,028,691 in wages. The industry's net worth was \$34,556,014.



By contrast, in 1955, wage earning employees numbered 453,000 with an annual payroll of \$1,893,000,000. The Industry's worth was placed by the U. S. Census Bureau at \$5 billion.



As the growth figures indicate, paper and paperboard consumption in the United States has soared. At the turn of the Century it amounted to only 57.9 pounds per capita. By 1956, it had increased to 432 pounds.



As a member of this growth industry, I would like to do more than mention a unique cooperative effort by the industry—but it is a story in itself. I refer to the Institute of Paper Chemistry, a splendid example of how competitors with common interests can work together unselfishly, for the common good.



The Institute of Paper Chemistry has been located in Appleton, Wisconsin for many years. Research activity during the past year began to approach 20,000 man-hours per month. The full-time staff of the Institute numbers more than 250.



The work of the Institute is devoted exclusively to the welfare of the pulp, paper, and paperboard industry. It represents by far the largest concentration of scientific and research effort in the world, devoted to the welfare of the industry as a whole. In addition, it graduates students with the degree of Doctor of Science. These students have become an important factor in the industry's management development program.



But quite aside from the Institute's activities on behalf of a widely distributed membership, Kimberly-Clark looks to its own

Research and Development Center for the discovery and development of new products for the public good, and for our own future growth.



These products will come; they are limited only by the creative talents of men, and the demands of the vast American Public for greater comforts, greater labor-saving, better daily living.



This, then, is the story of four young men who went in search of a profit, the guidebook that they used, and how they fared in their search.



Today, as I look to the future, I am possessed by the same optimism—the same spirit of opportunity—that possessed these four men, in 1872.

THE END



*“Actorum Memores simul
affectamus Agenda!”*





THIS NEWCOMEN ADDRESS, *dealing with the history of*
KIMBERLY-CLARK CORPORATION, *was delivered at a*
National Newcomen Dinner of The Newcomen Society
in North America, held at New York, N.Y., U.S.A., on
November 6, 1957. MR. KIMBERLY, the guest of honor,
was introduced by EDMUND FITZGERALD, President,
The Northwestern Mutual Life Insurance Company,
Milwaukee; Vice-Chairman of the Wisconsin Commit-
tee, in American Newcomen. The dinner was presided
over by the SENIOR VICE-PRESIDENT FOR NORTH
AMERICA, in this international Society.





“As the growth figures indicate, paper and paperboard consumption in the United States has soared. At the turn of the Century it amounted to only 57.9 pounds per capita. By 1956, it had increased to 432 pounds.

“As a member of this growth industry, I would like to do more than mention a unique cooperative effort by the industry—but it is a story in itself. I refer to the Institute of Paper Chemistry, a splendid example of how competitors with common interests can work together unselfishly, for the common good.

“The Institute of Paper Chemistry has been located in Appleton, Wisconsin for many years. Research activity during the past year began to approach 20,000 man-hours per month. The full-time staff of the Institute numbers more than 250.

“The work of the Institute is devoted exclusively to the welfare of the pulp, paper, and paperboard industry. It represents by far the largest concentration of scientific and research effort in the world, devoted to the welfare of the industry as a whole.”

—JOHN R. KIMBERLY



“This, then, is the story of four young men who went in search of a profit, the guidebook that they used, and how they fared in their search.

“Today, as I look to the future, I am possessed by the same optimism—the same spirit of opportunity—that possessed these four men, in 1872.”

—JOHN R. KIMBERLY





PAPER IN MODERN WORK AND LIVING!—*How completely disorganized and ineffective would be both the Business World and our everyday lives were Paper unavailable! Industry, Communication, Finance, Government, Education: how could these go forward? Scholarship, reduced to tablets of stone or the skins of unfortunate animals, would be at a standstill! Our entire lives would be upset; turned upside down; we should endure chaos. Civilization itself would darken. The picture is quite more than we can bear to contemplate. Instead, let us give all recognition to Paper and those who amazingly produce it!*



“Growing with Canada!”

*The Story of Canada's Oldest
and Youngest Stock Exchanges*

HENRY G. NORMAN, C.M.G.



558

1457



"Were American Newcomen to do naught else, our work is well done if we succeed in sharing with America a strengthened inspiration to continue the struggle towards a nobler Civilization—through wider knowledge and understanding of the hopes, ambitions, and deeds of leaders in the past who have upheld Civilization's material progress. As we look backward, let us look forward."

—CHARLES PENROSE

*Senior Vice-President for North America
The Newcomen Society of England*



This statement, crystallizing a broad purpose of the society, was first read at the Newcomen Meeting at New York World's Fair on August 5, 1939, when American Newcomen were guests of The British Government

"Actorum Memores simul affectamus Agenda"

“GROWING WITH CANADA!”
*The Story of Canada's Oldest
and Youngest Stock Exchanges*
An Address at Montreal



AMERICAN NEWCOMEN, *through the years, has honored numerous important corporate enterprises in broad fields of human effort, and both in the United States of America and in Canada. Such a Newcomen manuscript is this, dealing with the beginnings and growth and contributions of Canada's oldest and youngest stock exchanges—which have been “Growing with Canada!”*





“With the discovery of North America, vast new horizons were bared, upon which empires some day would be built. The discovery of Canada and its settlement rested on the shoulders of great individuals and the highest honors in these annals were shared by Jacques Cartier and Samuel de Champlain. To Cartier belongs priority of discovery and of the conception of empire. To Champlain, the establishment of actual and permanent colonization.”

—HENRY G. NORMAN, C.M.G.



“Growing with Canada!”

The Story of Canada's Oldest and Youngest Stock Exchanges

HENRY G. NORMAN, C.M.G.

MEMBER OF THE NEWCOMEN SOCIETY

PRESIDENT

MONTREAL STOCK EXCHANGE

MONTREAL



THE NEWCOMEN SOCIETY IN NORTH AMERICA
NEW YORK SAN FRANCISCO MONTREAL

1957

Copyright, 1957
THE NEWCOMEN PUBLICATIONS
IN
NORTH AMERICA



*Permission to abstract is granted
provided proper credit is allowed*



*The Newcomen Society, as a body,
is not responsible for opinions
expressed in the following pages*



*First Printing: November 1957
Second Printing: November 1957*



*This Newcomen Address, dealing with the
history of the Montreal and Canadian Stock
Exchanges, was delivered at the "1957 Canadian
Dinner" of The Newcomen Society in
North America, held in Windsor Hall, at
Montreal, P.Q., Canada, when Mr. Norman
was the guest of honor, on
November 7, 1957*



SET UP, PRINTED AND BOUND IN THE UNITED STATES
OF AMERICA FOR THE NEWCOMEN PUBLICATIONS IN
NORTH AMERICA BY PRINCETON UNIVERSITY PRESS





INTRODUCTION OF MR. NORMAN, AT MONTREAL ON NOVEMBER 7, 1957, BY EDWARD C. GRAY, EXECUTIVE VICE-PRESIDENT, NEW YORK STOCK EXCHANGE; MEMBER OF THE NEW YORK COMMITTEE, IN THE NEWCOMEN SOCIETY IN NORTH AMERICA.

My fellow members of Newcomen:

THROUGHOUT the free world, stock exchanges are increasingly recognized as institutions essential to national growth. When investors know that they can be assured of an honest market and fair dealings on an exchange, they are more willing to invest their savings in business and industry, thereby broadening the people's capitalism evolving in our economic democracies.



It is essential that the exchanges, therefore, be led by men of high moral standards and broad principles, who are at the same time practical men of business and finance. Our guest tonight is such a man, leading the Montreal exchange community to new stature in Canada's expanding future.



It is a particular pleasure for me on this occasion to bring to him the greetings of the New York Stock Exchange. Our regard

has been simply and effectively expressed by our president, Keith Funston, in these words: "The New York Stock Exchange has a close bond with the Montreal Exchange and has tremendous admiration for Mr. Norman and the work he is doing there." Mr. Funston would have expressed this sentiment in person had it not been that a goodwill mission to the exchanges of South America prohibits his being here at Montreal tonight.



Mr. Norman came to Canada from his native England in 1910 at the age of twenty and earned his reputation as a practical business man and an analytic expert in finance as a chartered accountant, both in Canada and the United States of America, becoming senior partner of Price, Waterhouse and Company.



Mr. Norman bore arms with the Canadian Machine Gun Corps in the First World War, and in later life demonstrated his keen sensitivity for public service as financial advisor to the British Commonwealth Air Training Plan and to the Minister for Defense for Air during the Second World War, as Ambassador to Venezuela in 1952-55, and later as Canadian Consul General in New York. King George VI honored him in 1944 with the Companion Orders of St. Michael and St. George, and in 1948 he received the Haakon VII Freedom Medal. During the past year he has devoted his tremendous capacities to enlarging the contribution to the Dominion economy of the Montreal and Canadian Exchanges.



It is a great pleasure to present to you our honored guest of the evening: HENRY G. NORMAN.





My fellow members of Newcomen:

I APPRECIATE this opportunity to appear with my colleagues in the Newcomen Society in North America and to tell you something of the story of Canada's oldest and youngest Stock Exchanges.



As a chartered accountant, turned diplomat, turned stockbroker, you are being confronted with an individual who appears to have never made up his mind. Perhaps that may be so, but in my short tenure of office with the Montreal and Canadian Stock Exchanges, I have made up my mind to one fact, and that is, that investment by Canadians is the key to "Growing with Canada" and that the Stock Exchanges must also grow to retain their proper place in the economy of Canada.



With the discovery of North America, *Mr. Chairman*, vast new horizons were bared, upon which empires some day would be built. The discovery of Canada and its settlement rested on the shoulders of great individuals and the highest honors in these annals were shared by Jacques Cartier and Samuel de Champlain. To Cartier

belongs priority of discovery and of the conception of empire. To Champlain, the establishment of actual and permanent colonization.



When Cartier sailed up the St. Lawrence River in 1535 to the Island of Orleans, near Quebec City, the Indians there told him that here began the land and domain of Canada. With that enters into history the perplexing mystery of the name of our Country. The mystery still remains unsolved, and one which proved an embarrassment to me 400 odd years later when I addressed a group of Venezuelan school children in one of my first duties as Canadian Ambassador to that country. After my talk, I said that I would be pleased to answer any questions. The first question was asked by a young lady of not more than twelve years of age who asked: "Mr. Ambassador, why is Canada called Canada?" Jacques Cartier perhaps knew, but I can assure you that I certainly was lost for any explanation and could only humbly reply that I did not know but would try to find out. In due course, I was furnished with three or four possible derivations, one being that at some time before Cartier's arrival on the scene, a Portuguese or Spaniard, angered at not finding gold, said in disgust, "Aca Nada!" or "nothing here." The polite natives picked it up and repeated it to Cartier to mean "That's us."



Time, and countless pioneers, like Champlain, La Vérendrye, Radisson, disproved that "nothing was here" and forged new frontiers, paving the way for colonization.



Where did it all begin, this growth of Canada? The fishing waters of our Eastern sea coast first attracted the early explorers to our shores, but it was the fur trade that kept them here. We might say that the fur trade arose as a by-product of the coastal fisheries. It is related that the shipwrecked survivors of the early settlements were returned to their native lands as objects of interest and pity. They were unkempt, bearded, objects of horror,

but clothed from head to foot in skins of seal and black fox. One can well imagine what a wealth of fur the distant interiors of Canada could then supply. Traders sailed westward to find this new form of wealth and their demands were eagerly met by the Indians. Furs were brought down by every river route, and the trade reached farther and farther into the continent. The French and the English established trading posts, which thus, in conjunction with the intrepid exploration carried on, was responsible for the development of a new world later known as Canada.



The fur trade created its own difficulties. It was from the first under royal licence and monopoly. But the illicit trade was as easy as it was tempting, and at least one governor sought thereby to retrieve a broken fortune. Two Huguenot traders, Pierre Radisson and Chouart des Groseilliers, punished as illicit traders by the French, offered their services to the English, and from this was to follow the formation in 1670 of the Hudson's Bay Company. Which, I might add, is still very much in existence today.



Thus began the *first* investment in Canada.



Prince Rupert and seventeen associates obtained from King Charles II their incorporation as "The Governor and Company of Adventurers of England trading into Hudson's Bay." The charter thus granted became one of the most far-reaching commercial documents in British history and had much bearing on the reality of the British Empire and the expansion of our race.



I will not go into details about the breadth and scope of this charter. But from an investment point of view, the original £10,500 put up by Prince Rupert and his associates had multiplied ten to one within fifty years, and in 1749 a 40 percent dividend was declared. Colonization continued to flourish and Canada was well on its way to becoming a nation by that time.

Communication was irrègular and uncertain as it was almost entirely by water, and in the matter of money and currency, confusion was everywhere. French coins were rare. Settlers and traders used beaver-skins and other substitutes as currency. Colonial coins (stamped by the Hudson's Bay Company) failed to circulate, and colonial paper money never bred confidence and quickly lost value. In 1774, at the time of the retention of Canada under British sovereignty, a semblance of order came out of the economic chaos. The native genius, or acquired capacity, of the English merchant and the Scottish banker were soon felt in a world in its infancy of industrialization. Their command of the commerce of Montreal, and control of the banking and transport and monetary power, laid the foundation of government and empire.



Despite internal struggles, Canada, the nation, was beginning to emerge. Migration no longer meant the wanderings of adventure, the flight of refugees towards shelter or of pilgrims to the ecstasy of wilderness. It was the outgoing of people from a crowded mother-country to new homes. It assumed proportions never seen before.



A new cycle of life began for the St. Lawrence River colonies and especially for that of Montreal. Montreal was advantageously situated at the confluence of the Ottawa and St. Lawrence rivers and thus had two great natural highways leading to it. The future, at that time, depended on the resource with which the rivers were used. Thanks to the energy of The Hon. John Molson, the scion of one of the families whose initiative have helped develop Montreal and Canada, a steamboat was plying between Quebec and Montreal in 1809. Additional boats followed, carrying passengers and freight up the rivers and lakes. The "forwarding business" as this was then called, grew to importance in the up-river traffic. It was an aspect of the middleman role for which its geographical position has cast Montreal, and was linked with the importing system of the city.

Land grants were made from time to time in many cases for services rendered. The development of the middleman position and the sale of lands brought money into Montreal; ergo—capital began to accumulate and the need for methods of handling financial transactions was urgent. The result was the founding of The Bank of Montreal in 1817, which became the financial rallying point for Montreal and Canada. Business organizations, money, banks, newspapers and University, all these plus historical continuity produced a compact block of power in Montreal.



While the Montreal Stock Exchange as an organized body dates back to 1874, its existence in more indefinite form can be traced to the Year 1842, which was twenty-five years before the British North America Act, creating the Dominion of Canada, was passed by the British. It was in 1842 that merchants and other business men, many of whom in later years left an indelible mark in the financial and commercial history of the city, met together with a view to buying, selling and exchanging produce or securities, as the nature of the day or the period of the year suggested.



From all existing records it would appear that this board, if it might be so called, consisted of some half dozen members, and the meetings, held now and again, were of the most informal character. In comparison with the up-to-date methods of the Montreal Stock Exchange of today, the mode of doing business at that period was both odd and interesting.



In transactions which required prompt action, the broker proceeded to hunt up buyers or sellers, going from office to office or counting room to counting room. In order to accomplish the desired result it might be necessary to make a trip to this or that person's private residence, and if perchance the winter snows were deep and the way long, the broker donned his snowshoes for the journey, for even the horse car was as unknown a factor in city life then as was the telephone a quarter of a century later.

Stocks of the character such as we are accustomed to today were few and far between in the then little city of Montreal; bonds and debentures of the Government, of the municipality and of the harbour being the ones chiefly dealt in. The bill broker, as he was then known, was a prominent figure in the community. He handled bills of exchange, discounts, and business of like character, for it must be remembered that the banking facilities of the period were crude indeed as compared with the present. The banks, for instance, had regular set discount days, once or twice a week, as they considered necessary. The consequence of all this was that business houses which had unexpected calls upon them for large sums were compelled to hand the matter over to the broker, who hustled about among the men with ready money at hand, and thus was the temporary difficulty tided over.



In those days, anything like an authentic quotation for a stock or bond was unknown in Montreal, the business being of such an irregular nature, it was next to impossible to establish the actual selling value of a security until offered, since it was mainly established by the law of supply and demand of money at the time of the transaction. As may be imagined, it was a matter which badly required a remedy, and with this object in view the first Board of Brokers was organized. The directory of 1849-50, the only existing record, calls attention to the Board of Stock and Produce Brokers, and such familiar names as McDougall Brothers, John Glass, I. and R. Esdaile, and Charles Geddes are mentioned as being members.



About this time, and up to the period when the Board of Brokers was established, it was customary for brokers, produce dealers, etc., to congregate for business in what is now Place Royale, the little plot on the river front then being known as Custom House Square.



The meetings of this Board of Stock and Produce Brokers were for a time held at weekly intervals, the main object being to estab-

lish prices for stocks, bonds, produce, etc., so the same might be incorporated into a weekly circular which was furnished by the members to their different clients both at home and abroad. Each of the brokers was furnished a certain number of circulars free in consideration of membership, while a great many more were sold in British centres, such as London, Liverpool and Glasgow, and also to the various papers. The profits arising from the publication of these price circulars was distributed among the members or carried to the credit of those who had upon joining elected to pay their admission fee of 100 Pounds Sterling in this manner.



This Board went on in the even tenor of its ways until 1861-62, when a partial re-organization took place, for at that period it was decided to divide the produce and stock business into separate camps. Thereupon the Corn Exchange was created and the dealers in securities became for the first time specialists and assumed the title of the Board of Stock Brokers. It appears, however, that for some years afterward certain of the members of one body retained their membership of the other. Shortly after the organization of the Board of Stock Brokers daily sessions were introduced, but the membership failed to increase with rapidity, for as late as 1868 the active list did not exceed fifteen names.



The Year 1869 proved one of great activity in the brokerage business. New corporations were gradually coming into being, a demand was created for these stocks and bonds, and the brokerage transactions increased materially. It was not until the Year 1872, however, that the present organization actually came into being, for it was then that the name was changed to the Montreal Stock Exchange, and two years later, in 1874, they became incorporated under that name with a charter from the Government of the Province of Quebec. About this time the afternoon session was instituted, for formerly the day's business was considered to be complete at noon.

At the time of incorporation, only seven years after Confederation, the number of issues traded had increased to 63. This list included 21 banks, 9 government and municipal issues, 4 railroad issues, 10 industrial stocks and 19 miscellaneous bonds and stocks. The daily turnover was then around 800 shares.



Just previous to incorporation the membership stood at twenty-seven, which was shortly afterwards increased to forty, at which figure it stood for many years.



Then came a time of greatly increased activity in the world of stocks and bonds. New companies were organized, old ones were re-organized; millions of dollars' worth of capital were required to push forward the development of the Dominion's industries, natural resources and transportation facilities, and the brokers were no longer confined to a half dozen active stocks.



Around the turn of the Century, the Exchange expanded rapidly. The completion of the Canadian Pacific Railway in 1887, giving direct access to Western Canada, the influx of settlers and increased industrial and manufacturing activity were all reflected in the growth of the stock list and an increased turnover. In 1902, membership was increased three times to total sixty and the Exchange decided to build its own home on a property located on St. François Xavier Street and purchased from the Seminaire de St. Sulpice. Construction was completed in 1904, when the members moved into the building which was to house them right up to the present time. The period from 1904 till the outbreak of the First World War was again one of steady expansion. Immigration reached a high point and new capital flowed into the country. Railway building continued apace, water power was harnessed, the pulp and paper industry came into prominence and manufacturing plants of many kinds materialized. The stock list had increased, at that time, to 182 issues and the number of members to 75.

In 1926, the Canadian Stock Exchange was organized by the members of the Montreal Stock Exchange, with a view to providing organized trading facilities for unlisted securities which could not meet the listing requirements of the Montreal Stock Exchange, or did not wish so to do. The Canadian Stock Exchange was first housed in the Canadian Pacific Telegraph Building on Hospital Street, but the quarters there soon proved too small and it was decided to make an addition to the Montreal Stock Exchange building. This transition from the "Curb Market" was completed in 1929, when the Canadian Stock Exchange moved into its present quarters. There are 100 members of the Canadian Stock Exchange, the majority of whom are also members of the Montreal Stock Exchange.



I do not have to emphasize to you, *Gentlemen*, the rapid transition which has taken place in Canada during the last few decades. In this time, there has been an entire change from a society predominantly rural, agricultural and mining in its character, to one which is urban and highly industrialized, the latter, of course, including the great mining, oil and power developments of our country as we know them today.



I think it may justifiably be said that one of the reasons for this very rapid change was the event of two world wars, which called upon all of our citizens to develop their technical knowledge with the greatest of speed, and to provide the necessary financial capital to enable their skills to be put to effective use, in order that Canada could take its proper place with the other allied countries of the world in meeting the demands for war material, so urgently needed at those times.



These developments have persisted since the termination of the Second World War as a result, in part, of the continually increasing demand for our mineral and forest products; in part, through the improved living standards of many peoples throughout the

world; and, in part, through the requirements of all nations for the development of the necessary resources to meet the possibility of aggression by Communist countries. Particularly apparent have been the developments in the mineral (including oil), power and industrial fields, all of which brought considerable pressure on the nation's financial facilities.



The stock exchanges have played their part by providing the facilities for the trading of securities which were issued in connection with these developments, and by maintaining therefor fluid markets which are recognized throughout Canada, the United States of America, Great Britain, Europe and, in fact, throughout the world.



The Montreal Stock Exchanges have nothing to sell except service. They provide a market place for securities where a willing seller can, through a broker, find a willing buyer and the Exchange activities are carried on under the principles of an auction market.



An exchange does not place the hallmark of approval on the merits of securities by virtue of accepting a company's application to list a stock. The merit of a security is a matter for personal judgment and is not guaranteed by the mere act of listing, nor is there any implication that the exchange recommends a listed stock to investors and speculators.



However, a certain measure of protection is afforded to the investing public, in that the Exchange officials, before accepting a stock for listing, require certain information concerning the company. This information includes such details as capital structure, financial status, management, share distribution, etc. These data are kept up to date and are available to the investor, or potential investor, at all times.

Today, the third largest trading volume in North America is maintained on the Montreal Exchanges, and more than 900 issues are listed whose shares can be bought and sold almost as readily as a bank account can be operated. These stocks are representative of almost every branch of industry in which Canada is engaged, and the prices at which transactions are executed on the Floors of the Exchanges reflect the basic laws of supply and demand. The exchange members have branch offices and correspondents throughout the world, and the fact that many of their transactions are for shareholders resident outside of Canada shows clearly their national and international character.



In view of the participation by the United States, British and European countries in the expansion and growth of our Canadian economy, the services referred to are all the more important to the maintenance thereof.



The pace of our development would have been much slower than has been the case had it not been for the investments, both financial and technological, made by these Countries.



Of the many problems involved in Canada's economic prospects, none carries more significance than the role and extent of investment. In recent months, much has been said about the large proportion of foreign investment in Canada's natural resources and industry. The prominence given to this matter may have caused some rather unnecessary apprehensions, but I feel sure that this problem can, and should, be resolved by conference and discussions between the nations involved at governmental levels, and a solution found which will be clearly acceptable to both foreign investors and the Canadian people.



In the early days of the development of the industrialization of the United States, much of the financing thereof was provided

by Great Britain, but it was for the main part by loans rather than by the purchase of equities, so that the financial control of the productive assets of that country remained in the hands of the United States citizens.



In the early period of heavy investment in Canada, the non-resident investor was not automatically getting an equity in the new resource that was being created because the productive resources being developed were largely in the hands of Canadians. Today, we are experiencing a great expansion of new resources and industries in which non-residents have an important proprietary interest through the companies which they control, and this interest carries with it definite future claims in return for the use of the capital which they venture.



The great rise in foreign investment in Canada has been most heavily concentrated in the commodity producing industries where large aggregations of capital and special skills are essential. Manufacturing, mining and petroleum are the areas of investment where the recent increases of foreign capital have been so spectacular, and these are the areas of activity that have been absorbing ever larger proportions of the gainfully employed.



The contrast between the structure of the Canadian economy now and only a few decades back is vivid and closely related to the changed pattern of international indebtedness. The decline in the relative place of agriculture is symbolic of this change. In the more agricultural economy which preceded World War I, the great investments of capital were largely in railways, other public utilities, and in spheres of social capital financed by government borrowing which took the form of borrowed money rather than the present form of equities in the new productive assets now being developed.

One must acknowledge the fact that the risks taken by foreign capital in the development of some of Canada's resources as well as in its industrial development have done much to bring into being our rapid development in the last few years and agree that the risks must be paid for.



I think it should be said that had these investments not been made, a great deal of the development of our natural resources and our industrial advancement might not yet have taken place, and therefore we should be thankful to those who took the risks which were involved. It may also well be said that such countries as have made substantial investments in Canada have done so having in mind their needs for a supply of strategic materials, in case of a further disruption in the world's affairs.



Canada is the "Storehouse of the Western World" and it is therefore logical that capital should flow into this country from outside of Canada, not only for strategic reasons but in order that those other nations may participate in the rewards of the development contingent thereon. This has been a condition which has been extant ever since Canada became a nation, but the time may well have come for us to take some regard as to the need for a greater control of our own destiny.



In the meantime, however, there is much that Canadians can do, not the least of which is to put their savings to work in acquiring a greater interest than they presently have in the potential of Canada through investment in equity securities.



There is no doubt in my mind that too few Canadians are taking an individual participation in providing the financial requirements for the furthering of the economic growth and development of Canada.

A country in which a large proportion of the adult population are investors in equity stocks of that country's publicly owned corporations, certainly would appear to me to be a much more stable country than one where such investments are mainly concentrated in the hands of various kinds of institutions and only a small part of the population itself.



The people of today are constantly seeking to secure long range financial security, over and above that which may be offered them by the State. This can, to some extent, be accomplished, not entirely by increases in take-home pay, which after all must be reflected in higher costs, but by each and every adult owning an interest in Canada through equity stocks, however moderate this may be at the start.



Once the individual appreciates the way in which his money can work for him, as well as he work for his money, he will be an interested party, not only in his own future but also in that of his Country.



Let us look ahead and try to visualize the part that the Montreal and Canadian Stock Exchanges can play in the economic growth of Canada, which it is believed will expand to an even greater extent in the future, notwithstanding that, without any question, this growth will pause from time to time to catch its breath and settle down. These pauses should not be looked upon as recessions but rather as periods of review and stabilization.



It has been stated in governmental forecasts that our gross national product for the current year will be in the neighbourhood of some thirty billion dollars and that capital expenditures to be made throughout the country are estimated to be not less than eight billion dollars a year.

The report of the Gordon Commission also indicates quite clearly the enormous anticipated need for capital investment to meet the requirements of the development of our Country over the coming twenty-five years.



This need for additional capital investment provides an excellent opportunity for all Canadians to participate in the growth of their Country. It is with this in mind that the Exchanges are planning an educational programme to explain to the public, not only the services that the Stock Exchanges in Montreal provide but, equally as important, the advantages to them as individuals, and to Canada, of participating in the great investment opportunities that I believe are today afforded to our citizens. This educational programme would not merely be one of self interest from the standpoint of the Exchanges, but would be aimed at creating a much greater number of citizens who should be well informed as to the advantages to them in participating in the ownership of a piece of the means of production in Canada. Its further aim is to educate them as to the need to the country, in its vast development programme, of their investing part of their savings in the stocks of Canadian corporations.



In conclusion, I should make mention of those members of the Montreal and Canadian Stock Exchanges who guided the destiny of the Exchanges over a period of almost a century. The example shown by them calls upon us to ensure that as Canada grows, so will its "Oldest and Youngest Stock Exchanges."



We are fully cognizant of the heritage that they have left with us, and we dedicate ourselves to continue to play our part in the future progress of our great Country.

THE END



"Actorum Memores simul affectamus Agenda!"



THIS NEWCOMEN ADDRESS, *dealing with the history of the Montreal and Canadian Stock Exchanges, was delivered at the "1957 Canadian Dinner" of The Newcomen Society in North America, held at Montreal, P.Q., Canada, on November 7, 1957. MR. NORMAN, the guest of honor, was introduced by EDWARD C. GRAY, Executive Vice-President, New York Stock Exchange; Member of the New York Committee, in American Newcomen. The dinner was presided over by the*

SENIOR VICE-PRESIDENT FOR NORTH AMERICA,
in this international Society.





“This need for additional capital investment provides an excellent opportunity for all Canadians to participate in the growth of their Country. It is with this in mind that the Exchanges are planning an educational programme to explain to the public, not only the services that the Stock Exchanges in Montreal provide but, equally as important, the advantages to them as individuals, and to Canada, of participating in the great investment opportunities that I believe are today afforded to our citizens.”

—HENRY G. NORMAN, C.M.G.





BONDS OF FRIENDSHIP, *amity, and understanding are traditional as between Canada and the United States of America—and are among cherished possessions of the two countries. Industry, transportation, communication, finance, and education—all of these are common denominators of mutual effort and mutual progress, on both sides of the international border—a border without barriers. The “Greetings” of the New York Stock Exchange to the Montreal Stock Exchange, found hereinbefore, are typical of a relationship between two countries which understand one another!*



"Blaw-Knox"

Growth Through Invention And Enterprise

W. CORDES SNYDER, JR.



589

1917



"Were American Newcomen to do naught else, our work is well done if we succeed in sharing with America a strengthened inspiration to continue the struggle towards a nobler Civilization—through wider knowledge and understanding of the hopes, ambitions, and deeds of leaders in the past who have upheld Civilization's material progress. As we look backward, let us look forward."

—CHARLES PENROSE

*Senior Vice-President for North America
The Newcomen Society of England*



This statement, crystallizing a broad purpose of the society, was first read at the Newcomen Meeting at New York World's Fair on August 5, 1939, when American Newcomen were guests of The British Government

"Actorum Memores simul affectamus Agenda"

“BLAW-KNOX”

Growth through Invention and Enterprise

An Address at Pittsburgh



AMERICAN NEWCOMEN, *through the years, has honored numerous corporate enterprises and in many fields, both in the United States of America and in Canada; as well as honoring the lives and work of those who have founded and those who have carried forward these enterprises. Such a Newcomen manuscript is this, dealing with the history and contributions of an organization widely known in America's*

basic industries!





“In the history of American business and industry, there is an unmistakable pattern to the onward flow of its progress. First, there is a need that cries be met, whether it be for a better mousetrap, or for a more efficient steel mill. Then follows the efforts of resourceful and inventive people to create a variety of machines, products, or methods to satisfy this need, all of them subject to the stiff tests of practical application and acceptance. Finally, there appears the spirit of enterprise which seeks to take the best of what is offered, to organize its manufacture and distribution, and to make it available against the competition of the market wherever the need exists.”

—W. CORDES SNYDER, JR.



“Blaw-Knox”
*Growth Through Invention
And Enterprise*

W. CORDES SNYDER, JR.

MEMBER OF THE NEWCOMEN SOCIETY

PRESIDENT

BLAW-KNOX COMPANY

PITTSBURGH

PENNSYLVANIA



THE NEWCOMEN SOCIETY IN NORTH AMERICA
NEW YORK SAN FRANCISCO MONTREAL

1957

Copyright, 1957
W. CORDES SNYDER, JR.



*Permission to abstract is granted
provided proper credit is allowed*



*The Newcomen Society, as a body,
is not responsible for opinions
expressed in the following pages*



*First Printing: November 1957
Second Printing: November 1957*



*This Newcomen Address, dealing with the
history of Blaw-Knox Company, was delivered
at the "1957 Pittsburgh Dinner" of The New-
comen Society in North America, held at Du-
quesne Club, Pittsburgh, Pennsylvania, U.S.A.,
when Mr. Snyder was the guest of honor,
on November 7, 1957*



SET UP, PRINTED AND BOUND IN THE UNITED STATES
OF AMERICA FOR THE NEWCOMEN PUBLICATIONS IN
NORTH AMERICA BY PRINCETON UNIVERSITY PRESS





INTRODUCTION OF MR. SNYDER, AT PITTSBURGH ON NOVEMBER 7, 1957, BY BENJAMIN F. FAIRLESS, PRESIDENT, AMERICAN IRON & STEEL INSTITUTE; DIRECTOR, FORMER PRESIDENT AND CHAIRMAN, UNITED STATES STEEL CORPORATION; VICE-CHAIRMAN OF THE PITTSBURGH COMMITTEE, IN THE NEWCOMEN SOCIETY IN NORTH AMERICA.

My fellow members of Newcomen:

OUR guest of honor has been intimately associated with this area for many years. I am sure, therefore, that he is well known to you and that his role here tonight comes as no surprise.



But perhaps in my brief, pleasant assignment I can add a few, interesting observations to what has already been set down on the career of W. Cordes Snyder, Jr.



All of his friends and business associates know Cord Snyder as a "steel industry man." But if you take a real close look at the record, you will find that he never actually worked for a company producing rolled steel or one regarded as a member of the steel industry. Nonetheless, I am sure he is every bit a "steel

man" because of his life-long association with it as a foundryman, metallurgist, steel mill builder, and conscientious supplier.



I know from personal experience that Cord Snyder is a stubborn, incurable optimist. He was that kind of person when he came calling on me at Massillon, Ohio, in the depression years, and made me feel that I was passing up a good thing if I didn't buy his rolls. And he apparently did a similarly good selling job to the charming Virginia Harper of Wheeling, because they were married in the lean year of 1932.



The Snyder family tree is solidly rooted in Pennsylvania soil, his son and daughter representing the sixth generation of the family in this State. His father, of Pennsylvania Dutch stock, was manager of bituminous mines of the Lehigh Valley Coal Company. His mother, the former Mary Perry, traces her ancestry to a family of ocean shippers on the Perry side, and to the Millikens, who were active in the industrial development of Pennsylvania through timber, coal, and iron-making.



Cord Snyder was born June 12, 1903 at Snow Shoe in central Pennsylvania. While studying mining and metallurgical engineering at Lehigh University in Bethlehem, Pennsylvania, he spent the summer months working in coal mines, in surveying, and as a laborer at Wheeling Mold & Foundry Co. Leaving college after his junior year in 1925, he began working full time at the foundry, first as a molder's helper, then in the pattern shop, and finally as a chemist. In 1927, he joined Lewis Foundry & Machine Company, as a metallurgist.



At the age of 34 he became President of Lewis Foundry, which in the meantime had become a part of Blaw-Knox. He was also elected a Vice-President of the parent company. At this point, I recall being firmly reminded that Cord Snyder was both a

great competitor and a strong believer in competition. It was in the early war period that I learned that his Lewis plant had sold a 112-inch plate mill to a promising young steel man named Henry Kaiser for the production of plates for Liberty ships.



In 1945, Cord left Blaw-Knox to accept the presidency of Continental Foundry & Machine Company. Two years later, he joined Koppers Company as Vice-President in charge of engineering, construction, and initial operation of a completely integrated steel plant in Chile. This daring assignment, which produced a successful and now expanding steel enterprise in South America, is further proof of his spirit of optimism.



I remember when Cord left his job of Vice-President and General Manager of the Koppers metallurgical department and returned to Blaw-Knox as President. This was late in 1951. His company has grown and made notable progress since then.



It is also one of those coincidences, or fate, that three of his former employers—Wheeling Mold & Foundry, Lewis Foundry & Machine, and Continental Foundry & Machine—now are all component parts of the Blaw-Knox Company that is growing under his leadership and is dedicated to serving steel and other basic industries.



While the record speaks for itself regarding Cord's industrial activities, I think we would be remiss in not recognizing his extensive interests in professional organizations, encompassing almost all of the outstanding Engineering Societies.



In the civic area, he has been active in numerous organizations such as the Chamber of Commerce; and, in addition to being a money-maker, he has proved quite adept as a money-taker in assisting such organizations as the American Red Cross, United

Fund, YMCA and YWCA, the American Cancer Society, and the National Foundation for Infantile Paralysis.



When the *Horatio Alger Awards* Committee honored Cord in 1956, it came to light that he was a money-maker even as a 'teenager, selling furs from a winter trapline near his mountain home. Well, I've never been able to find out whether he was trapping mink or rabbit. But whatever kind it was, I'm sure that young Cord sold it as the best darn fur you could buy in those parts.



Now I suppose I've given you quite a bit of testimony about Cord Snyder; and perhaps you may feel as did the gentleman who recently completed two weeks of jury duty. A friend asked him what most influenced him in a certain case. "Well," said the juror, "I didn't let nothin' that speaker said influence me. I just took a good squint at the man and said to myself, 'If he didn't do nothin', why is he here?'"



Gentlemen, I don't know whether you can tell just by squintin', but I now give you a former fur-trapper, foundry worker, metal-lurgist, builder of steel mills, a skilled money-taker, and now head of one of Pittsburgh's most vigorous companies—W. CORDES SNYDER, JR.





My fellow members of Newcomen:

ALL of us of the Blaw-Knox organization deeply appreciate the honor which you and The Newcomen Society are paying us by your presence here tonight. Personally, I feel very fortunate—and proud—that it has fallen to me to bring you the story of our company's development and growth over the past 51 years.



In the history of American business and industry, there is an unmistakable pattern to the onward flow of its progress. First, there is a need that cries be met, whether it be for a better mouse-trap, or for a more efficient steel mill. Then follows the efforts of resourceful and inventive people to create a variety of machines, products, or methods to satisfy this need, all of them subject to the stiff tests of practical application and acceptance. Finally, there appears the spirit of enterprise which seeks to take the best of what is offered, to organize its manufacture and distribution, and to make it available against the competition of the market wherever the need exists.



Such a pattern is served by the form of our society and by American workers and people generally. But it is particularly

stimulated by the contributions of two types of individuals. They are the men of ideas: inventors, scientists, engineers; and the men of action: enterprisers, organizers, salesmen.



Mr. Chairman, in my study of the archives and upon reflection of my association with the company, the history of Blaw-Knox Company strongly reflects this spark of innovation and the drive of enterprising people that together make for new developments and growth. All but five of my adult working years have been spent with Blaw-Knox or its components, and through these years I have respected the force of this inventiveness, this urge to grow, which characterized not only the original pioneers, but so many others in the organization. And which seemed to be the attraction for others of the same bent to join the enterprise.



This *enterprising open house for inventors* traces the history of its parent root to March 12, 1906, when the Blaw Collapsible Steel Centering Company, incorporated under the laws of the State of New Jersey, was formed to manufacture and market reusable steel forms for molding concrete in heavy construction.



The founding of the enterprise took place in an era of inventive ferment. There had been an active period of development of wireless telegraphy and with the invention of the radio telephone in 1906, we were in the heart of the early scientific period of radio development.



Looking back to the atmosphere of that decade, the Wright Brothers made their historic first air flight—United States Steel Corporation was formed—the first automobile trip across the continental United States of America was completed—and the Ford Motor Company was organized. Just months before the birth of Blaw-Knox, Einstein announced his theory of relativity. Perhaps this is as good a time as any to remind you also that *in*

1906, the expenditures of the U.S. Federal Government were only 570 million dollars; an earthquake levelled San Francisco; and there were just 45 States in the Union.



The initial product line of the young Blaw company was based on the patented invention of Jacob B. Blaw of Philadelphia, who obtained the financial support of Moses Lehman, of Pittsburgh, and his sons, for establishment of the business.



I have heard stories of how Mr. Blaw first decided there was a need for re-usable steel forms for molding concrete. It appears that this resourceful man had a background both as a molder of metal statues of musical composers—these were very popular around the turn of the Century—and as a construction contractor. Just several years before the birth of the new company, he had a contract for construction of some concrete sewers in Pittsburgh. Almost immediately he saw a need. This was for a better way to set the concrete for the sewers than by means of the wooden forms normally used for such work. These old forms had to be laboriously built into place and after the concrete had cured, the wooden forms were dismantled and usually destroyed. Remembering his experience in molding and casting metal statues, he decided there should be collapsible steel molds that could quickly be assembled to hold the concrete and then could be stripped and given repeated use. He was successful in materializing his idea, obtained patents, and, through the help of the Lehmans, this business was born.



The young firm began with nine stockholders and with an organization consisting of Moses Lehman as President; Albert C. Lehman as Vice-President and General Manager; a bookkeeper; a draftsman; a salesman; and one stenographer, in addition to the consulting services of Mr. Blaw. They rented a one-room office in what then was known as the Westinghouse Building, at Penn Avenue and Ninth Street, in Pittsburgh.

Early work of the new company consisted of supplying forms for the construction of aqueducts, sewers, and tunnels. Project contracts soon associated the firm with such landmarks in engineering as the Delaware Aqueduct for New York City's water supply, the Panama Canal, and some of the early subways or vehicular tunnels serving metropolitan centers.



It is a pleasant coincidence of history to note that both the Blaw root of our company in its early days, and Wheeling Mold & Foundry Company, my first full-time employer and now a part of Blaw-Knox, had supplier roles in the building of the Panama Canal and many of our famous vehicular tunnels. Wheeling supplied operating machinery and castings for the gates of the Canal, and also supplied thousands of tons of tunnel segments.



The young Blaw-Knox also developed forms for concrete arch bridges—the Westinghouse Memorial Bridge is one well-known application—and forms for the construction of retainer walls, dams, and so forth. Street and road forms were added in the period just before the First World War and helped extend the trend toward the gradual establishment of a line of general construction and road paving equipment. Steel forms have continued through the years to be a profitable product for the company and for the construction industries.



Manufacturing at first was sub-contracted, then handled for short periods at temporary plants, particularly at Reynoldsville, Pennsylvania. In 1912-1913, it was moved to the first of new facilities built at what was then known as Hoboken but which, in 1918, was renamed Blawnox, Pennsylvania.



That the company was growth-minded was evidenced in other ways: by the attraction and employment of personnel with specialized fabricating experience; by starting, in 1909, to produce

clamshell buckets and components for bucket manufacturers; and by a change of its name in, 1912, to Blaw Steel Construction Company. In that year, the company obtained personnel with backgrounds in structural engineering and general fabrication and entered the transmission tower business.



Moses Lehman had three sons, one of whom, Albert C., was an officer of the firm at its formation. The youngest son, Chester H., joined the firm upon his graduation from college, in 1909. Mr. Chester H. Lehman, who, I am very happy to say, is with us tonight, is the only surviving member of the founding family, and can rightly be proud of that family's handiwork and of his own outstanding contributions to the total result.



The eldest Lehman son, Irvin F., meanwhile had become associated with another man of inventive genius—Luther Knox—in the establishment of the Knox Pressed and Welded Steel Co. Luther Knox had pioneered the use of pressed and welded steel, in place of previously used non-ferrous castings, for the manufacture of water-cooled equipment for open hearth furnaces and for other high temperature applications.



The present name, Blaw-Knox Company, was adopted July 6, 1917, marking the merger of Blaw Steel Construction Company with the Knox Pressed and Welded Steel Company. This merger introduced the company to the steel industry market. It also brought together in one business firm the three Lehman brothers. Moses Lehman, meanwhile, had died in 1914; he was succeeded by Albert C. Lehman, who continued as President until his own death in 1934.



The first of many patents covering bucket developments was issued to the company on March 12, 1918, and these developments marked the nucleus of a new product line.

In 1919, the company established a wholly owned subsidiary, incorporated in Delaware, which became the Blaw-Knox Construction Company, and whose charter is the basis of the present Blaw-Knox Company. Through this subsidiary, the company engaged in the erection and installation of equipment associated with the sale of its manufactured products. Much later in the firm's history, this subsidiary was used for the sale and execution of prime engineering-construction services, such as the erection of piping systems and the building of chemical plants.



During the 1920's, Blaw-Knox took a number of significant steps to expand and round out its product lines. First, the company entered the field of pressure vessels through the use of hammer welding, then a method of fabrication which was winning acceptance as an improvement over riveted construction for many uses. After some years of very successful business in this field, the company recognized the approaching importance of electric fusion welding and established this method of fabrication for many of its products. That experience was the nucleus from which Blaw-Knox developed its association with markets in the chemical process industries.



In this period, the company also began to establish itself as the producer of certain specialties. In 1924, it began the manufacture of standard steel buildings. In 1927, through a license agreement, it started producing electro-forged grating, a form of open steel flooring with wide application throughout industry. Also in that year, through an export subsidiary which merged with Milliken Brothers Manufacturing Company, the company added radio towers to its products and strengthened its position in foreign business and in transmission towers. And a purchase in 1928 introduced the company to the market for gas cleaners.



As you can see, these were years of venturesome undertakings, some of them involving no little risk. But "AC" Lehman was a

venturesome man with a business philosophy to go with it. The story is told that on one occasion, when management was considering some daring, forward step, a colleague warned that the contemplated action might "put them out on a limb." To which Mr. Lehman replied: "Let's get out on the limb—that's where the fruit is!"



It was no wonder then, that in 1929, the growth-conscious Blaw-Knox Company acquired five other enterprises. Early in the year, A. W. French & Company, maker of certain road-paving machinery, became part of Blaw-Knox. This was a factor in the firm's eventual establishment of a complete package of road-building equipment, the first component of which was, of course, the road and street forms dating back to the early years. Meanwhile, the company was also establishing a line of general construction equipment such as ready-mix concrete plants, bins and batchers, and concrete and clamshell buckets.



Most significant development of this era was the acquisition, also in '29, of the Lewis Foundry and Machine Co.; National Alloy Steel Co.; and Union Steel Casting Co., which also owned more than 99 percent of Pittsburgh Rolls Corporation.



Acquisition of the four foundry companies substantially changed the nature of the Blaw-Knox enterprise and gave it a dominant orientation to the metallurgical industries market. The Lewis and Pittsburgh Rolls units made Blaw-Knox an important supplier of rolls to the metal industries. Union provided a line of cast steel plant equipment and an entry into other markets for steel castings. Lewis also introduced the company to the manufacture of rolling mills, machinery, and accessories. National Alloy was a young specialty producer of high alloy castings in premium qualities suitable for service under conditions of severe exposure to high temperatures, corrosion, and abrasion.

The foundry units for the first time advanced Blaw-Knox beyond a one-plant enterprise and added complexity to the management and marketing functions. The company was still young in its enlarged form when the depression of depressions struck. It hit with accentuated fury at enterprises such as ours which were devoted to supplying industry with capital goods and production equipment. Thus came the test of whether so young a corporate parent could hold its assets and results of growth . . . and whether the new units would show the fight and the loyalty that might be expected more naturally of the older, under-one-roof organization.



I was then at Lewis, nominally in different capacities at different times—at one time a roll-maker, later shop superintendent, sales manager, and then vice-president. But the titles and job descriptions didn't mean a thing, either to me or anyone else. I found myself laboring in the foundry one day, maybe helping on the machining floor the next, and visiting customers and prospects in between. Anyone in the family—and everyone there was in the business family—anyone who could walk and talk and knew the business and what we could do, was a salesman and working to sell. And those visits to Massillon that Mr. Fairless graciously recalled had vital importance to the score card.



It was so, I learned, at the other foundries. In fact, one of our foundry units actually netted black figures—little ones, but still in that wonderful, beautiful black color—virtually all through the Depression. I say this only to make the point that at least in one big measure, the new combination under the Blaw-Knox banner passed the crucial test of the depression years. But, of course, those years did exact some special costs and the company had to rally its spirit and resources before surging growth could again be evidenced.



In the middle '30's, death took both Albert Lehman, who had been President for 20 years, and Irvin, who succeeded his brother and was President for two years. Upon the latter's death in 1936,

Frank Cordes, who had joined the company when it acquired Lewis Foundry & Machine, became President. While Mr. Cordes was President, Chester H. Lehman, whom we may regard as the company's marketing pioneer, became Executive Vice-President. Mr. Cordes advanced to Board Chairman in 1937, when William P. Witherow became President and Mr. Lehman assumed the added responsibility of Vice-Chairman.



Mr. Witherow provided leadership for the enterprise during the company's second extended period of aggressive development and growth. I am happy to say that this gentleman, another of those to whom Blaw-Knox is indebted for outstanding contributions to the company's progress, is also here with us tonight. If I may be permitted to go ahead of my story a little, it is appropriate here to say a few words about Mr. Witherow. Apart from his role as the company chief executive, it is my conviction that the Nation is indebted to him for his contribution to industrial preparedness and support of the war effort. No Liberty or War Bond salesman ever worked harder than Bill Witherow. As President of the National Association of Manufacturers at a pivotal time in our national affairs, he rallied industry to all-out support of the defense and war efforts with unstinting appeals, visitations, and speeches. And he inspired his own people to the limits of their capabilities, so that we were doing dozens of things beyond the range of our background, and supervising thousands of new employees and emergency war workers at our own and at borrowed and improvised plants.



In 1937, Blaw-Knox purchased the assets and business of Power Piping Company and Power Piping Construction Company. This placed the company in the fields of pre-fabricated piping and fire protection sprinkler systems. The former introduced Blaw-Knox to another phase of the electric power plant equipment market and to added phases of the steel and process industries markets. The first large participation of this unit under Blaw-Knox was the fabrication and erection of the piping facilities for "the mill on the hill," United States Steel's famous Irvin

Works. The steel industry continued as an important consumer of this Piping Division's services. The design and installation of fire protection sprinkler systems has a broad market, covering nearly all industry.



In the late 1930's, the company expanded its engineering research and development activities and obtained technical personnel which became the nucleus of later expansions into chemical process engineering services.



The period of the Second World War was significant in demonstrating the company's versatility. Early in the critical period, Blaw-Knox had collaborated with the United States Navy to pioneer the development of cast armor for naval vessels. Then, in 1940, the company assumed a contract from the British Purchasing Commission to provide turrets for modern tanks. It adapted its background of work with the U.S. Navy to produce cast armor turrets for British Army tanks and developed cast armor for U.S. Army tanks. When our Nation entered the war, Blaw-Knox became an established supplier of such items as tank turrets, range finder hoods, transmission housings, and tank hull sections.



In the Spring of 1941, Blaw-Knox purchased an old tin plate works at Martins Ferry, Ohio, and equipped this plant for the production of Naval 40-millimeter anti-aircraft Bofors gun mounts. Later in the war, by Government directive, Blaw-Knox was chosen to take over operation of the Naval Ordnance Plant at York, Pennsylvania, and thus became the sole supplier of the Bofors gun mounts.



Other military production included the manufacture of Naval gun slides and mounts; such varied items as rockets, projectiles, torpedo launching equipment, and *LST* and aircraft carrier equipment, and the operation of a 16-inch shell line, and a Bomb Di-

vision. For the excellence of its war effort, Blaw-Knox won seven Army-Navy "E" awards, with a total of 16 stars, including renewals.



From the standpoint of eventual peacetime application, the most significant of the company's war activities was the execution of a contract for the Defense Plant Corporation in establishing a standardized design synthetic rubber plant. The company also extended itself in this program by executing contracts for constructing some of the facilities to produce the Nation's critically needed synthetic rubber. I feel that the people of Blaw-Knox and of the pioneering rubber manufacturers can take pride in the existence of a growing synthetic rubber industry, which was developed under the pressure of emergency need, which played its part in winning the war, and which today protects consumers and the free world against sharp upheavals in the cost or critical shortages in the supply of rubber products.



The immediate postwar era brought many problems of human adjustment. As Mr. Witherow once said during that period: "Machines have reconverted, but men have not." But the company began striving to orient itself to the new conditions and to establish a bigger basis for peacetime operation. So the quest for growth was on again. One important step was to draw on the experience in the synthetic rubber program, coupled with a resumption of the war-interrupted engineering research and development work for the process industries. Thus, late in 1945, the company formally organized the Chemical Plants Division, although in an informal and limited sense this organization had existed since 1939.



This division has established the company as a growing supplier of engineering and construction services to a wide range of process industries. What is perhaps of equal importance is that this activity further exposes Blaw-Knox to the frontiers of industrial development. Included in this division's horizon are the developments

in nuclear energy, the growing importance of chemical engineering in the steel and other metal industries, and advances in the chemical, fats and oils, food processing, gas, low-temperature processing, ore extraction, petroleum and petrochemical, pharmaceuticals, plastics, synthesis, and other fields.



From this entry into services for the process industries, it was logical to think of expanding the company's role in manufacturing process equipment, already performed to some degree at the original Blawnox plant. Hence, in 1945, Blaw-Knox purchased the principal assets and business of Buffalo Foundry and Machine Company, of Buffalo, N.Y., and organized this facility as the Buflovak Equipment Division. A related acquisition occurred in 1946, when the company acquired Buflovak Northwest Company, Mora, Minnesota, which is now our Dairy Equipment Division.



The next acquisition was in 1948, when Blaw-Knox purchased The Foote Company, Inc., of Nunda, N.Y. This unit added concrete and black top pavers to the company's product line and advanced the Blaw-Knox aim of providing a single source for road paving equipment, although the package was not yet complete.



In the 1950's, Blaw-Knox again moved into the atmosphere of emergency production for national defense. Here again we have the pleasant coincidence that a number of company components of different origin, but now all in the family, distinguished themselves in the excellent performance of supplying armor castings for Army tanks. Of the Continental Foundry & Machine Company, now part of this company, three plants all participated in the tank armor business of recent years; on the older Blaw-Knox side, our Union Steel Castings plant has the distinction of having been a supplier for every major tank contract placed since the Korean emergency.

During the recent defense period, Blaw-Knox also produced Naval 3-inch anti-aircraft gun mounts. For these our Lewis plant organized a feeder supply line of nearly 300 sub-contractors and established a logistics and information service for the whole network. We even supplied training, special tools, techniques, and advisers to a competitive supplier of the guns, so that the Government would have two sources.



There were also the extensive engineering services for the Atomic Energy Commission and other Government agencies; and the supply of special products for defense, as well as for industries having critical importance to national security.



Late in 1951, it became my privilege to return to Blaw-Knox and to assume its presidency. My years away from Blaw-Knox had varied my experience with developments affecting the metallurgical industries and given me a chance to size up the company from the view of outside observers, both friendly and critical.



At that time, I naturally reflected upon the development of the company during its first 45 years and considered, in particular, the changes which had occurred to pose new challenges for Blaw-Knox. There was no question in my mind then, nor is there now, but that the earlier administrations had met the major needs of their times. They had certainly demonstrated the creative abilities of the company organization. Incomplete records show that the company in its single-plant era had generated at least 300 patents; the score up through 1950 was over 600; and through last year, 750, with the possibility that complete records would bring the count close to 1,000. And all this was in addition to the "open-door" which the company historically displayed to outside inventors and developers.



But 45 years of industrial progress had brought changes in the "how" of inventions, as well as in the requirements for their profit-

able application. New conditions had also created new needs, and in some respects new restrictions, which had to be satisfied as prerequisites for further and lasting growth.



Over the years, the role of the inventor as an individual contributor to industry diminished in importance. Our own batting average in the profitable commercialization of new developments had been declining. Yes, we had arrived at an age where the exercise of inventiveness is properly *a team effort* of organized research and development. It is not only a team effort at the technical level, but also in its essential coordination with economic research, market development, capital resources, provision of proper manufacturing facilities, and other factors. Some of these relate to vital considerations in overall company planning. For example, shall we limit our developments in products and services to those areas where the company already operates? Or shall we venture into entirely new fields where the risk as well as the potential may be greater?



The increasing complexity of the company as it took on added activities and bigger size also posed the need for a tightening of controls and more effective planning, coordination, and communication. We were well aware that the primary trend in large industry was decentralization. However, effective decentralization requires a strong, central core of organization with clear lines of authority, policy, and communication, as well as planned standards and targets for performance.



Accordingly, in 1952, the company accomplished a "downstream merger" to consolidate the parent and all subsidiaries into a single Delaware corporation, utilizing the original charter of the former Blaw-Knox Construction Company. This consolidation was but one step in a program of integration and improvement that was aimed at more effectively stabilizing the company's operations and improving its opportunities for planned future growth.

Among the steps taken to implement this aim was the acquisition, in January 1954, of the All Purpose Spreader Company of Elyria, Ohio, to round out the company's line of products for highway construction. The product package for this market thus completed, the company decided to consolidate the manufacture of its road machinery, then produced at three widely scattered plants, into one modern factory. This new plant was located at Mattoon, Illinois, and began operation early in 1956. It is ready to make its contribution to America's highways under the expanded road-building program.



In October 1954, Blaw-Knox acquired the Tri-Lok Company of Pittsburgh to supplement its own line of steel grating. In 1955, the company began to consolidate at its Buffalo plant the making of process equipment previously performed at the crowded, original Blawnox plant. Meanwhile, service to the dairy industry had been consolidated at the Dairy Equipment Division, Mora, Minnesota.



Once the product re-alignments were executed, it became possible to begin improvements at the original fabricating plant. We also were studying the possibilities of favorable acquisitions that would advance the company's capabilities while retaining its pattern of serving *four* basic market categories. These are: (1) the metallurgical industries; (2) chemical process and nuclear industries; (3) public service industries; and (4) public works and highway construction industries. The company also has some activities serving industry at large.



Largest acquisition in the company's history took place on Nov. 14, 1955, when Blaw-Knox purchased the plants, inventories, and business of Continental Foundry & Machine Company. This move brought us foundry plants at East Chicago, Indiana; Wheeling and Warwood, West Virginia; and at Coraopolis, Pennsylvania; as well as the plant of the Copes-Vulcan Division at Erie, Penn-

sylvania. The Erie plant produces power plant accessories. The foundry plants, which included substantial machine tool facilities at East Chicago and at Wheeling, have greatly increased our ability to serve the metal industries, both in the growing Midwest and in the Eastern heartland of steel.



Our program of integration has since carried forward to its logical next step: We consolidated the eight foundry and machinery plants into the Foundry & Mill Machinery Division; we coordinated our five fabricating divisions into a Fabricated Products Operations group; and our other two divisions, which provide engineering-construction services (one operates a pipe fabricating plant), constitute the company's third functional category of operations.



To coordinate and extend the research work historically carried on at the various units, and to press for a new and major upgrading of the results from our technical efforts, it was natural that we established a central Development and Research Department. Thus, the tasks of inventing, or of developing improved or new products, as well as pacing the competition in our operating technologies, are now maturing as coordinated, team ventures.



I'm sure this Newcomen audience will agree that the need for inventiveness today does not stop with research or engineering activities, but reaches into virtually all functions of industrial management. So we have tried to strengthen our organization in this respect, both through the addition of new and more varied talent, as well as through the building of unity by better communication, closer teamwork, and better planning.



Most of all, we have tried to rally our spirit and imagination, so that we may both appreciate and measure up to the challenge inherent in today's problems and opportunities. No one can know

in advance whether we shall match yesterday's pioneers in satisfying needs, in creating progress and growth. But it will help if we recognize that pioneering spirit is never out of fashion—it is only the conditions and methods of its use that change. It will help if we take inspiration from those who set the example . . . and if we make the same all-out try.



And if someone in the future tells this company's story, I trust he will be able to report new chapters of creative contribution and growth. I know that we have many wonderful people throughout our present organization. In my belief, they are just as dedicated as the personnel of the past. Through their help, and by the Grace of God, some of the best history of this company is yet to be written. Yes . . . although we salute the past from which we take lessons and inspiration, Blaw-Knox is *51 years young* . . . and still serves, lives in, and belongs to the *Future*!

THE END.



*"Actorum Memores simul
affectamus Agenda!"*





THIS NEWCOMEN ADDRESS, *dealing with the history of*
BLAW-KNOX COMPANY, *was delivered at the "1957*
Pittsburgh Dinner" of The Newcomen Society in North
America, held at Pittsburgh, Pennsylvania, U.S.A., on
November 7, 1957. MR. SNYDER, the guest of honor,
was introduced by BENJAMIN F. FAIRLESS, President,
American Iron & Steel Institute; Director, Former
President and Chairman, United States Steel Corpora-
tion; Vice-Chairman of the Pittsburgh Committee, in
American Newcomen. The dinner was presided over by
PRESSLY H. McCANCE, President, Duquesne Light
Company, Pittsburgh; Chairman of the Pittsburgh
Committee, in this international Society.





“If someone in the future tells the Blaw-Knox story, I trust he will be able to report new chapters of creative contribution and growth. I know that we have many wonderful people throughout our present organization. In my belief, they are just as dedicated as the personnel of the past. Through their help, and by the Grace of God, some of the best history of this company is yet to be written. Yes . . . although we salute the past from which we take lessons and inspiration, Blaw-Knox is *51 years young* . . . and still serves, lives in, and belongs to the *Future!*”

—W. CORDES SNYDER, JR.





“GROWTH THROUGH INVENTION AND ENTERPRISE”—

these two characteristics have been fundamental to our American Economy! They connote: vision, courage, resourcefulness, determination, and hard work. In the pages you have read is the dramatic, colorful, human life-story of an internationally-known industrial enterprise, which, since 1906, has exemplified these very qualities. America's industrial leadership is of such fibre and fashioning!



3 5282 00419 6559



3 5282 00419 6559